
Employment and Employee Compensation in the 1967 Input-Output Study

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Employment and Employee Compensation in the 1967 Input-Output Study

by

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U.S. DEPARTMENT OF COMMERCE
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PREFACE

Staff papers present reports on BEA research that is more specialized or less well established than BEA research generally made available to the public.

The work for this paper was performed in the Interindustry Economics Division under the guidance of Philip M. Ritz, Chief, and Albert J. Walderhaug, Chief of the Research and Analysis Branch. The report was prepared by Peter E. Coughlin. Important assistance was provided by Howard L. Schreier. Camera-ready copy was prepared by Peggy L. Burcham of the Interindustry Economics Division and by Billy Jo Hurley and her staff in the Current Business Analysis Division.

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EMPLOYMENT AND EMPLOYEE COMPENSATION IN THE 1967 INPUT-OUTPUT STUDY

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EMPLOYMENT AND EMPLOYEE COMPENSATION IN THE 1967 INPUT-OUTPUT STUDY

INTRODUCTION

This report presents estimates, by industry, of employment and compensation of all employees, and of employment, wages, and hours of production workers in manufacturing and mining consistent with the classifications and definitions used for the Bureau of Economic Analysis (BEA) input-output (I-O) table for 1967. ^{1/} The estimates can be used to extend the I-O analysis of the impact of stipulated final demand on industry output to include the impact on employment, hours, and payrolls.

The estimates in this report differ slightly from the employee compensation estimates published with the revised 1967 table in BEA Staff Paper No. 29. The differences result from some new data and new methodology. The current estimates were made at the 484-industry I-O level and are available on request to the Interindustry Economics Division (IED) of BEA. The estimates shown in this report have been aggregated to the 85- and 367-industry levels, in table 3 and Appendix Table 5, respectively. Estimates by broad I-O industry groups are shown in Appendix Table 2.

Three earlier studies contain employment estimates for 1967 in I-O industry detail. ^{2/} However, two were developed before publication of BEA's 1967 I-O table and none reflects the revised NIPA's published in 1976. Further, none is fully consistent with the definitions used in BEA's published I-O table.

1. The estimates are consistent with the 1967 I-O table revised to reflect the benchmark revision of the national income and product accounts (NIPA's) published in January 1976.

The NIPA revisions are described in the January 1976 SURVEY OF CURRENT BUSINESS, parts I and II, *The National Income and Product Accounts of the United States: Revised Estimates 1929-74*; the July 1976 SURVEY, and *The National Income and Product Accounts of the United States, 1929-74: Statistical Tables*, a supplement to the SURVEY.

The revised I-O tables appear in BEA Staff Paper No. 29, *Revised Input-Output Tables for the United States: 1967*, BEA-SP 77-029. Single copies are available from the Interindustry Economics Division (IED), BEA. Additional copies may be purchased from the National Technical Information Service (NTIS), Springfield, Virginia 22161, for \$5.25 each (\$3.00 microfiche). The accession number is PB-270-259/AS.

2. These studies are: *The Structure of the U.S. Economy in 1980 and 1985*, Bulletin 1831, Bureau of Labor Statistics (BLS), U.S. Department of Labor, 1975, Appendix C; Roger Bezdek, et al, *Derivation of the 1963 and 1967 Total Employment Vector for 367 I-O Sectors*, CAC Document No. 63, Center for Advanced Computation, University of Illinois, Urbana, Illinois, April 1973; and Deane Merrill, *U.S. Employment for 368 Input-Output Sectors for 1963, 1967, and 1972*, prepared for the Energy Research and Development Administration under Contract W-7405-ENG-48, Lawrence Berkeley Laboratory, University of California, Berkeley, California, June 1975.

CHOICE OF EMPLOYMENT MEASURE

Since the I-0 tables are integrated statistically and conceptually with the NIPA's, the employment and related measures shown in this report are based on the corresponding NIPA measures. The NIPA measures are derived from data from the unemployment insurance (UI) employment statistics program. ^{3/} For use in the NIPA's, the UI employment data are adjusted to include groups excluded from UI coverage--employees of small firms, nonprofit and charitable institutions, railroads, and government--and to exclude U.S. private workers regularly employed abroad.

The employment and related measures do not include the self-employed or unpaid family workers. Estimates of unpaid family workers are incomplete and unreliable in total and by industry. For the self-employed, it was considered essential that the employment estimates match the estimates of compensation of employees. However, estimates of the compensation component of the earnings of the self-employed are not available and hence the number of self-employed is not included. Estimates of self-employed persons by broad industry groupings are available upon request to the National Income and Wealth Division (NIWD) of BEA.

As will be seen in the discussion of the methodology which follows, data from the UI series, from the economic censuses, and from the Census Bureau's *County Business Patterns* are used to derive the detailed I-0 industry estimates.

METHODOLOGY

Several steps are required to adapt the NIPA estimates of compensation of employees and the number of full- and part-time employees by industry to I-0 requirements. The first step is to derive additional detail to match the I-0 classification. The NIPA detail shows 63 industries at generally the 2-digit Standard Industrial Classification (SIC), whereas the finest detail in the I-0 industry classification is 484 industries. The 484-industry detail includes 49 types of construction, nearly all of the 4-digit SIC industries in manufacturing, and 17 agricultural industries.

The second step is to eliminate statistical differences in the data from which the NIPA and I-0 tables are derived. The statistical differences between the economic censuses and the UI data stem mostly from differences in the industry classification of establishments. As noted, the latter are the basis for the NIPA estimates and the former are largely the basis for the I-0 tables. However, differences between the Census and NIPA estimates are relatively small for major industry divisions. The adjustments which were made to resolve these statistical differences are identified as NIPA - I-0 adjustments in table 1 and Appendix Tables 3 and 4.

3. *Employment and Wages*, Fourth Quarter and Annual, 1967, Manpower Administration, U.S. Department of Labor. This is now published by BLS. The UI data cover full- and part-time workers and exclude the self-employed and unpaid family workers.

The third step is the reclassification of establishments that appear in one industry in the NIPA's but in a different industry in I-O. For example, establishments engaged in the sale of trading stamp services (SIC 7396) are moved from NIPA's miscellaneous business services (SIC 73) to trade (I-O 69).

The final step is similar to reclassification in that it involves a redefinition of an activity within an establishment from one industry to another to achieve a more homogeneous input structure. In this process, the output of the activity being redefined and the associated inputs, including employee compensation and the other components of value added, are shifted from one industry to another. There are two types of redefinitions which affect many or most of the I-O industries. Force account construction (FAC)--new and maintenance and repair construction performed by employees of a nonconstruction establishment for its own account--has been redefined into the I-O construction industry. This type of redefinition affects virtually all producing industries. Similarly, manufacturers' sales offices (MSO's) are redefined from wholesale trade into the I-O manufacturing industry which they serve.

Other redefinitions usually involve only pairs of industries. For example, alumina was shifted from industrial inorganic and organic chemicals (I-O 27.01) to primary aluminum (I-O 38.04). These specific redefinitions are made for activities within establishments for which either the pattern of sales or the input structure is more similar to that for another industry than the one in which the establishment is originally classified. These redefinitions are shown in Appendix Table 7.

Table 1 shows the effect of the adjustments described above, by major industry groups, and serves as the focus of the following discussion of the procedures used in deriving the more detailed I-O estimates. Appendix Tables 3 and 4 show the same information at the 85-industry I-O classification.

Agriculture, forestry and fisheries

In developing the detailed employment and compensation estimates for this major industrial division, NIPA data for employment and compensation serve as the initial controls in total and for the two main components: farms, which include livestock and products (I-O 1) and other agricultural products (I-O 2); and agricultural services, forestry and fisheries, which include forestry and fisheries (I-O 3) and agricultural services (I-O 4).

The agricultural portion of the I-O tables was prepared in large part by the Economic Research Service (ERS) of the U.S. Department of Agriculture. The most detailed I-O table (at the 484-industry level) shows 17 farm industries, for which employment estimates for full- and part-time workers were distributed by BEA among the industries in proportion to estimates of employee hours of hired labor prepared by ERS in the same detail. (See Appendix Table 6.) Employee compensation was prorated using the ERS estimates of wages paid to hired labor, assuming that the ratio of wage supplements to wages was the same in each of the agricultural industries. The split of agricultural services, forestry and fisheries into forestry and fisheries (I-O 3) and agricultural services (I-O 4) was made using UI 3-digit SIC detail and unpublished BEA estimates.

There are no NIPA - I-O adjustments in agriculture (I-O 1 and 2). However, the I-O table reclassifies the offices of veterinarians and animal hospitals (SIC 0722) from agricultural services (I-O 4) to other medical and health services (I-O 77.03). The amounts reclassified were estimated using detail available from UI data on employment and wages and salaries.

Table 1.--Reconciliation of NIPA and I-O Employment and Employee Compensation, 1967^{1/}

	Employment (Thousands of employees)										Employee compensation (Millions of dollars)								
	NIPA (1)	NIPA- I-O adjust- ments (2)	I-O - SIC classifi- cation changes (3)	Redefinitions				I-O - (8)*	NIPA (1)	NIPA- I-O adjust- ments (2)	I-O - SIC classifi- cation changes (3)	MSO ^{3/} (4)	Force ac- count con- struction (5)	Redefinitions					
				MSO ^{3/} (4)	Force ac- count con- struction (5)	Redefinitions								Out (6)	In (7)	Other (7)	Out (6)	In (7)	I-O (8)*
						Out (6)	In (7)												
Agriculture, forestry and fisheries -----	1,547.0	-----	-22.7	-----	27.6	-----	1,552.0	4,694	-----	-----	-90.3	-----	-----	-----	106.7	4,710.4			
Mining -----	613.0	-39.2	-107.3	-----	-----	-----	408.7	5,291	-408.1	-794.5	-----	-----	-526.1	-----	-----	3,562.3			
Construction -----	3,344.0	-26.5	107.3	-----	53.1	-135.5	4,443.9	27,106	-342.7	794.5	-----	-----	9,562.8	-753.6	440.7	36,907.7			
Manufacturing -----	19,506.0	39.2	-----	193.4	166.6	-55.5	19,779.3	151,224	408.1	-----	-----	2,078.2	-542.6	-502.5	1,201.6	153,866.8			
Transportation -----	2,661.0	-----	-----	-----	8.4	-11.4	2,566.0	21,847	-----	-----	-----	-----	-860.2	-92.2	66.4	20,961.0			
Communications and utilities -----	1,613.0	26.5	-----	-----	-----	-----	1,485.1	13,935	342.7	-----	-----	-----	-1,496.8	-----	-----	12,780.9			
Trade -----	13,862.0	-----	13.5	-193.4	503.8	-911.4	13,268.0	75,216	-----	-----	59.5	-2,078.2	-49.6	-5,153.0	2,296.4	70,286.1			
Finance, insurance and real estate -----	3,282.0	-----	-----	-----	7.0	-18.5	3,057.5	22,799	-----	-----	-----	-----	-1,603.7	-127.8	27.0	21,094.5			
Services ^{2/} -----	12,523.0	-----	9.2	-----	899.2	-533.4	12,879.0	55,496	-----	-----	30.8	-----	-145.5	-2,336.8	4,832.1	57,876.6			
Government and rest of world -----	16,380.2	-----	-----	-----	-----	-----	15,891.7	94,307	-----	-----	-----	-----	-4,438.3	-----	-----	89,868.7			
Total -----	75,331.2	0	0	0	1,665.7	-1,665.7	75,331.2	471,915	0	0	0	0	0	-8,970.9	3,970.9	471,915.0			

*The entries in column 8 are the sums of the entries in columns (1) through (7).

1/ Table covers full- and part-time employees, excluding self-employed persons and unpaid family workers.

2/ Includes household services.

3/ Manufacturers' sales offices.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Redefinitions for FAC did not affect agriculture (I-0 1 and 2). Landscaping services were redefined into agricultural services (I-0 4) from construction (I-0 11 and 12) and from trade (I-0 69). (See Appendix Table 7.)

Mining and manufacturing

The NIPA - I-0 adjustments of employment and compensation shown for mining and manufacturing in table 1 result from differences in the classification of establishments between the NIPA series based on UI data and the Census data used in the I-0 study. The effects of these differences can be seen in table 2, which compares the two sets of data at the 2-digit SIC level of detail. The largest difference occurs in the petroleum and natural gas mining industry (SIC 13). However, when employment in this mining industry is combined with that in petroleum refining (SIC 29), the difference virtually disappears.

		(Thousands of employees)	
		<u>NIPA</u>	<u>Census</u>
SIC 13 4/	-----	275.0	244.9
SIC 29 4/	-----	<u>180.0</u>	<u>210.8</u>
Total	-----	455.0	455.7

Similarly, there is a difference of nine thousand employees between NIPA and Census for metal mining (SIC 10) and there is a difference of seven thousand for coal mining (SIC 11 + 12), but there are no obvious offsets in related manufacturing industries.

To arrive at the estimates in this report, BEA prorated the NIPA employment and wages and salaries totals for combined mining and manufacturing in proportion to the detailed Census employment and payroll estimates. This procedure was adopted due to differences in coverage of nonproduction workers by the Census (as discussed below). It was assumed that any classification differences in mining and manufacturing between the Census and UI would impact minimally upon other industry divisions. The Census estimates which were used included the adjustments for Central Administrative Office (CAO) personnel described in the next section. Thus, all the Census industry employment totals were increased by 1.1 percent and all the Census industry wages and salaries totals were increased by 1.7 percent. (See table 2.) Since the mining and manufacturing portion of the I-0 table for 1967 was based principally on these Censuses, the above procedure should yield employment and compensation estimates consistent with I-0 industry inputs and outputs.

The extent of the needed prorations is not quite as large as it may seem in using the figures shown in table 2. The NIPA figures should be looked at after adjustment for SIC 13 and 29, as shown in the following table. Because the Census data already reflect this adjustment, the differences are actually much less, particularly for the mining industries.

4. Includes central administrative offices.

Table 2.--Comparison of Census Bureau and NIPA Employment and Wages and Salaries, 1967

SIC	Employment (Thousands of employees)					Percent discrepancy (4) - (3) (4)	Wages and salaries (Millions of dollars)					Percent discrepancy (8) - (7) (8)
	(Thousands of employees)						(Millions of dollars)					
	Censuses of Minerals and Manufactures						Censuses of Minerals and Manufactures					
	Operating establishments (1)	CAO ^{2/} (2)	Total ^{1/} (3)	NIPA (4)			Operating establishments (5)	CAO ^{2/} (6)	Total ^{1/} (7)	NIPA (8)		
10 11 + 12 13 14	----- ----- ----- -----	----- ----- ----- -----	70.9 131.6 244.9 119.9	80 139 275 119	+11.4 + 5.3 +10.9 - 0.8	----- ----- ----- -----	----- ----- ----- -----	552.4 967.3 1,885.1 812.0	613 1,012 2,152 845	+ 9.9 + 4.4 +13.8 + 4.0		
Total mining	-----	-----	567.3	613	+ 9.3	-----	-----	4,186.8	4,622	+ 9.1		
20 21 22 23 24	1,649.6 75.1 929.1 1,356.7 554.0	76.3 8.0 25.0 16.2 7.7	1,725.9 83.1 954.1 1,372.9 561.7	1,790 86 966 1,390 603	+ 3.6 + 3.4 + 1.2 + 1.2 + 6.8	10,076.8 376.8 4,390.9 5,582.2 2,798.9	764.7 74.4 219.7 140.0 73.7	10,841.5 451.2 4,610.6 5,722.2 2,872.6	11,303 454 4,753 5,924 3,095	+ 4.1 + .6 + 3.0 + 3.4 + 7.2		
25 26 27 28 29	425.3 638.9 1,031.0 841.4 141.6	4.7 31.8 21.1 141.3 69.1	430.0 670.7 1,052.1 982.7 210.7	452 680 1,059 1,001 180	+ 4.9 + 1.4 + .7 - 1.8 -17.0	2,258.2 4,436.2 7,151.2 6,443.0 1,216.1	46.8 350.5 172.0 1,489.1 744.4	2,305.0 4,786.7 7,323.2 7,932.1 1,960.5	2,469 4,876 7,395 8,144 1,617	+ 6.6 + 1.8 + 1.0 + 2.6 -21.2		
30 31 32 33 34	516.7 328.7 589.9 1,281.0 1,341.8	14.3 7.9 30.7 48.1 33.3	531.0 336.6 620.6 1,329.1 1,375.1	515 352 634 1,325 1,358	- 3.1 + 4.4 + 2.1 - .3 - 1.3	3,286.5 1,458.8 3,825.5 9,850.9 9,319.5	135.3 59.4 308.3 544.8 350.5	3,421.8 1,518.2 4,133.8 10,395.7 9,670.0	3,420 1,632 4,289 10,431 9,688	.0 + 7.0 + 3.6 - .3 - .2		
35 36 37 + 19 38 39	1,864.5 1,874.9 2,234.5 394.3 423.1	64.9 105.7 103.4 3/ 15.3 6.1 3/	1,929.4 1,980.6 2,337.9 409.6 429.2	1,976 1,968 2,291 446 434	+ 2.4 - .6 - 2.9 + 8.2 + .6	14,226.3 12,968.0 18,702.1 2,821.6 2,291.0	703.9 1,138.5 1,194.0 3/ 159.2 58.8 3/	14,930.2 14,106.5 19,896.1 2,980.8 2,349.8	15,449 13,912 19,409 3,366 2,452	+ 3.5 - 1.4 - 2.5 +11.4 + 4.2		
Total manu- facturing	18,492.1	830.9	19,322.9	19,506	.9	123,480.5	8,728.0	132,208.5	134,108	+ 1.4		
Total manu- facturing and mining			19,890.2	20,119	+ 1.1			136,395.3	138,730	+ 1.7		

1/ Total Census figures for mining industries are from the Bureau of the Census' Census of Mineral Industries: 1967; central administrative office (CAO) employment is included in mining. Data in columns (1) and (5) are from the Bureau of the Census' Census of Manufactures: 1967. Total Census figures for manufacturing include the separate estimates for CAO's in columns (2) and (6).

2/ Central administrative offices.

3/ Two thousand employees and \$25.3 million in wages and salaries were moved from Census CAO's for SIC's 19 + 39 to SIC's 37 + 19.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

	Mining		Manufacturing	
	Employment (thousands)	Wages and salaries (millions)	Employment (thousands)	Wages and salaries (millions)
NIPA -----	613.0	\$4,622.0	19,506.0	\$134,108.0
Adjustments for SIC				
13 and 29 -----	-30.1	-266.9	30.1	266.9
Adjusted NIPA -----	582.9	4,355.1	19,536.1	134,374.9
Less: Census -----	-567.3	-4,186.8	-19,322.9	-132,208.5
Difference ---	15.6	\$ 168.3	213.2	\$ 2,166.4
Percentage difference ---	2.7	4.0	1.1	1.6

A portion of the apparent undercoverage in the Census employment data is due to the method for compiling the data. For production workers, the Census averages the number on the payroll during the pay period which includes the 12th of March, May, August, and November, whereas the statistic for "all other" employees is reported only for the period including the 12th of March. Thus, in a period of rising employment, the "all other" total would be understated. The UI total employment data, on the other hand, are averages of twelve monthly pay periods. The Census estimates of total wages and salaries are for the entire year. There is no information on why the Census payroll estimates are less than the NIPA estimates.

While the agreement is close for mining and manufacturing as a whole, there are significant differences at the 2-digit SIC level. These can be attributed to differences in the classification of establishments in the two data sources. (See table 2.) UI data are obtained from the 50 State agencies and the District of Columbia by the Bureau of Employment Security of the U.S. Department of Labor. It is difficult to ensure that data collected by these 51 agencies will be consistent in uniformity and currency of classification of reporting establishments, whereas the Census data are compiled nationally under one set of rules.

In order to arrive at employee compensation estimates for the detailed mining and manufacturing industries, it was necessary to estimate supplements to wages and salaries. ^{5/} Supplements for mining industries were based on the NIPA ratio of supplements to wages and salaries at the 2-digit SIC level. In manufacturing, the estimates were made in two groups. (1) For tobacco manufactures (SIC 21) and petroleum and coal products (SIC 29), supplements were estimated separately due to underreporting of 1967 supplements in these industries in the *Annual Survey of Manufactures, 1969*. The ratios of supplements to wages and salaries for each of these 2-digit industries were assumed to be equal to the NIPA ratios. The derived total supplements for SIC 21 and 29 (minus Census supplements for operating establishments and estimates of supplements in CAO's) were prorated among the corresponding 4-digit SIC industries, based on Census payroll data plus estimates of CAO wages and salaries. Then Census and CAO supplements were added back to obtain the final estimates. (2) For the remaining I-O manufacturing industries,

5. Supplements to wages and salaries is the compensation of employees not commonly regarded as wages and salaries. It consists of employer contributions for social insurance; employer contributions to private pension, health, and welfare funds; compensation for injuries; death benefits; directors' fees; pay of the military reserve; and a few other minor items of labor income.

supplements were estimated by prorating the NIPA supplements for manufacturing and mining (minus supplements estimated for mining and SIC 21 and 29) to the individual I-O industries, using Census data on 1967 supplements shown in the *Annual Survey of Manufactures, 1969*, plus estimates of CAO supplements. The supplements for CAO workers were estimated by assuming the same ratios to wages and salaries as those for other workers.

The procedure for adjusting employment and wages and salaries gave 2-digit estimates for mining industries. Detail from the *Census of Mineral Industries, 1967* on employment and payroll was used to break down the NIPA 2-digit information where finer classifications were necessary.

Oil and gas field services (SIC 138) are part of mining in NIPA, but they are considered construction for I-O purposes and are, therefore, reclassified into the construction industry. This shifts 105.9 thousand employees and \$771.6 million of compensation out of mining into construction.

Central administrative offices are included in the mining industry data in the *Census of Mineral Industries, 1967*. However, CAO's are not included in the manufacturing industries in the *Census of Manufactures, 1967*. Therefore, estimates for the latter CAO's were calculated, as follows.

Central administrative office adjustments in manufacturing

Except for a few industries, the industry detail for manufacturing in the 484-industry I-O table is at the 4-digit Census of Manufactures level and is consistent with the industrial detail in the Census. However, information on employment and wages and salaries in CAO's of manufacturing establishments is available at only the 2-digit Census level. CAO's account for 4.2 percent of manufacturing employment and had to be distributed to the I-O industries which they serve. The Census of Manufactures data on employment and wages and salaries for CAO's at the 2-digit level were used as control totals for the distribution to the 4-digit level. This distribution was done in two stages. First, the 2-digit controls were prorated to approximately the 3-digit SIC level using information available in the Bureau of the Census publication, *1967 Enterprise Statistics, Part 3, Link of Census Establishment and Internal Revenue Service Corporation Data*, covering corporations whose major activity was in manufacturing. In this source, the CAO employment and wages and salaries are classified by the principal industry served, according to the classification used by the IRS (sometimes 3-digit SIC and sometimes 4-digit SIC). Second, when further detail below these levels was needed, data from the *Census of Manufactures, 1967*, Volume 1 on employment and payrolls for operating establishments of multi-unit companies were used to prorate the CAO estimates to the finer level.

In 1967, the CAO's for ordnance (SIC 19) and miscellaneous manufacturing industries (SIC 39) were combined in the 2-digit Census data. In order to derive the CAO's associated with ordnance, it was first necessary to split the combined total. This was done by using related data from the *Census of Manufactures, 1963*. Next, since *Enterprise Statistics* does not show separate data on ordnance, it was necessary to prorate SIC 19 CAO employment and payrolls across the *Census of Manufactures, 1967* 4-digit operating establishment detail for ordnance.

There are three classes of redefinitions: force account construction, manufacturers' sales offices, and other "specific" redefinitions. In all cases, the employment associated with the "specific" redefinitions was estimated by using the ratio of employment to compensation for the industry receiving the redefined output. This applied whether or not the redefinition affects industries outside of mining and manufacturing.

There are no redefinitions into or out of mining other than FAC, which amount to 57.6 thousand employees and \$526 million of compensation.

Redefinitions of MSO's into manufacturing amount to 193 thousand employees and \$2,080 million of compensation, or about one percent of the manufacturing total. The data on employment and wages and salaries for MSO's in the Census is given at the 4-digit SIC level for kind-of-business in wholesale trade (SIC 50). In assignment of employment and wages and salaries to manufacturing industries, information on commodity-line sales by kind-of-business was used to identify the manufacturing classification of the MSO's. This is consistent with the treatment of manufacturing transactions in the I-O table.

The redefinitions of FAC out of manufacturing are relatively small--71 thousand employees and \$543 million of compensation. The redefinitions are primarily to maintenance and repair construction (I-O 12).

The specific redefinitions-out of manufacturing are mainly installation work to new construction (I-O 11), while redefinitions-in to manufacturing are largely the miscellaneous manufacturing activities performed in trade (I-O 69). The detail for these and the other minor redefinitions affecting manufacturing is shown in Appendix Table 7.

Construction

The I-O table contains estimates for 49 types of new and maintenance and repair construction, consisting of both contract construction and FAC. These measures provided estimates of total wages and salaries paid to contract construction employees. Total wages and salaries were divided by estimates of wages and salaries per employee, developed for the current study, to arrive at estimates of contract construction employment.

Wages and salaries per employee were calculated in several steps. Based on a BLS study 6/, the 49 I-O construction types were classified into low-wage and high-wage categories. For the low-wage category, the average hourly rate for construction workers for 1969 was assumed to be equal to the hourly rate shown in BLS's *Labor and Material Requirements for Construction of Private Single-Family Houses*, Bulletin 1744. This rate was extrapolated to 1967 by the movement in the BLS measure of average hourly earnings of construction workers in the general building contractors industry. 7/ The 1967 hourly

6. *Labor and Material Requirements for Construction of Private Single-Family Houses*, BLS, 1972, Bulletin 1755, page 8.

7. *Construction Review*, U.S. Department of Commerce, Bureau of Domestic Commerce, Volume 20, number 2, March 1974, table G.4, page 59. For average hours per week, see page 60.

rate was converted to an estimate of annual wages and salaries per employee (amounting to \$6,180) on the assumption of 36.5 hours per week and 50 weeks per year. To calculate employment by type of low-wage construction, this annual estimate per employee was divided into the annual total of wages and salaries for the following types of contract construction: residential single-family housing, residential additions and alterations, farm residential buildings, and farm service facilities. The estimate of wages and salaries and of employment for the low-wage category in total was subtracted from the NIPA estimate for the total contract construction industry to derive the corresponding estimate for the high-wage contract construction activities. From these residuals, the annual wage and salary estimate per employee was calculated (\$8,307) and divided into the I-O wage and salary estimates for each of the high-wage types of contract construction, to derive the contract employment estimates.

One NIPA - I-O adjustment is required. The UI data upon which NIPA estimates are based include telephone installation workers in construction. The I-O table includes the output of these workers and their compensation in the communication industry (SIC 48). Therefore, 26.5 thousand employees and \$342.7 million in employee compensation were shifted from construction to the communication industry.

The redefinition of FAC added 1,102 thousand employees and \$9,663 million of employee compensation to the I-O construction industry. In making the redefinitions, the same high and low wages and salaries per employee rates were divided into the estimates of FAC wages and salaries to be shifted from each industry to determine how many employees should also be moved. If the FAC was being sent to low paying construction industries (e.g., single-family residential housing), the low annual wages and salaries per employee rate was used; otherwise, the high rate was used. Supplements were assumed to be in the same proportion to employee compensation as in the industry sending the FAC to construction. Since the shifting of FAC employment and compensation was such a large proportion of the total I-O construction industry (about one-fourth of the total industry) and because of the rough assumptions used to calculate FAC employment, the accuracy of the resulting numbers in construction is uncertain. 8/

Specific activities redefined out of construction reduce employment and employee compensation by 136 thousand and \$754 million, respectively. Specific redefinitions into construction provided increases of 53 thousand employees and \$441 million in compensation. (See Appendix Table 7.)

Transportation

Few changes to the NIPA 2-digit estimates were required to adapt them to match the I-O table. It was necessary only to break down transportation services (SIC 47) to obtain detail for stockyards (SIC 473) and rental of railroad cars (SIC 474) and assign them to motor freight transportation and warehousing (I-O 65.03) and railroads and related services (I-O 65.01), respectively. Data on wages and salaries covered in the UI program 9/ were used to prorate the NIPA employment and compensation figures for SIC 47 to SIC 473 and 474.

8. See section on Evaluation of the Industry Estimates.

9. *Employment and Wages*, 1967, *op. cit.*

About four percent of employment and employee compensation has been redefined into new and maintenance construction. The percentage is greater than for most industries because of large investment in structures, particularly in the railroad and pipeline industries.

A specific redefinition from transportation to manufacturing is the employment and compensation associated with building and rebuilding railroad equipment in company-owned shops. In addition, there is a redefinition associated with merchandise sales, from the warehousing industry to trade. Redefinitions to transportation from trade reflect the public warehousing activity that occurs in wholesale trade and the service activities of marinas in retail trade. (See Appendix Table 7.)

Communications and utilities

The NIPA classification for communications is the same as for the I-O industries. The NIPA - I-O adjustments of 26.5 thousand employees and \$342.7 million in compensation are due to shifting certain telephone installation workers from construction to the communication industry. See the above discussion of this shift in the section on construction.

The NIPA and I-O classifications are consistent for the utility industries as a whole. To provide the breakdown of the NIPA utilities data into electric utilities, gas utilities, and water and sanitary services, as defined in the I-O classification, detailed UI data for SIC 49 was used. It was further necessary to break down combination companies (SIC 493) into components that match the I-O classification. For this purpose, information reported to the Federal Power Commission by the combination companies was used.

The redefinition of FAC involved 154 thousand employees and \$1,147 million of compensation--about 10 percent of the total. Similar to transportation, force account employment is a larger percentage of total communications and utilities employment than in most industries because of the large fixed investment in structures. There are no specific redefinitions into or out of these industries.

Trade

The NIPA classification is consistent with that used for the I-O study and the estimates of employment and compensation are based on coverage which is more complete than the data reported to the Census; hence, no additional detail had to be estimated. The classification change shown in table 2 reflects the reclassification of trading stamp companies (SIC 7396) from business services into retail trade. The redefinition of MSO's out of trade was discussed above in the section on manufacturing. FAC redefinitions are very small.

Specific redefinitions of employment and compensation out of trade are mainly services performed in wholesale and retail establishments and some minor manufacturing activities. Redefinitions to trade are the employment and compensation associated with merchandise sales that occur mainly in service establishments.

Finance, insurance, and real estate

The NIPA classification is consistent with that used in the I-O study, so that no additional detail needed to be estimated. Redefinitions for FAC reduced employment in these industries by 212 thousand and compensation by \$1,604 million, virtually all of which was

in the real estate and rental industry, I-0 71. (See Appendix Tables 3 and 4.) The specific redefinitions into and out of these industries are minor. (See Appendix Table 7.)

Services

Except as noted below, the NIPA classification is consistent with the I-0 classification; hence, the NIPA figures for the service group are used as controls for allocation of employment and compensation to the individual I-0 industries. The NIPA figures were used rather than the separate industry estimates of employment and payrolls from the *1967 Census of Selected Services*, because there was strong evidence of undercoverage in this Census. Furthermore, the Census did not cover all the service industries defined in the I-0 table nor the total output of some services as defined for I-0 purposes. Where additional detail was required for the I-0 classification or reclassification, proportions developed from UI data and from *County Business Patterns* were used to break down the NIPA totals. The classification change shown in table 2 is the net result of two reclassifications: animal husbandry services (SIC 0722) reclassified out of agriculture into services and trading stamp services (SIC 7396) reclassified into trade from business services. FAC redefinitions are relatively small. The specific redefinitions out of service industries are mainly to trade and to other service industries, and conversely, redefinitions to services are also from trade and from other service industries. (See Appendix Table 7.)

Government enterprises, government industry, and rest of the world

The I-0 figures for employment and compensation agree in total with the published NIPA figures, except for the differences due to the redefinition of FAC. The additional I-0 detail shown for Federal and State and local government purchases is available in unpublished form from the NIPA's.

PRESENTATION OF THE DETAILED INDUSTRY ESTIMATES

The I-0 estimates of employment, compensation, and related measures are shown at the 85-industry level in table 3. Appendix Table 5 shows the estimates at the 367-industry level. Estimates at the 484-industry level are available upon request to IED. The related measures include wages and salaries and supplements, which were derived in the same way as the employee compensation data and are consistent with the published NIPA data at the 2-digit SIC level. In addition, table 3 and Appendix Table 5 contain information for the mining and manufacturing industries on production worker employment, wages and salaries, and hours, based on data in the *1967 Censuses of Manufactures and Mineral Industries*. Production worker employment, hours, and wages were estimated for the I-0 industries by making the same industry adjustments as those made for calculating the total employment and compensation estimates. However, they were not adjusted upward as were the all-employee estimates, because there are no NIPA controls for production workers.

The only reclassification that affected production worker estimates was that which moved oil and gas field services (SIC 138) from mining to construction. The Census production worker data for SIC 138 were removed from mining and reclassified into construction as construction workers.

Table 3.--Employment, Compensation, and Related Measures,
by 85-Industry I-O Detail, 1967

Industry number	All employees				Production workers*		
	Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)
1	448.9	1,299.7	1,222.0	77.7	-----	-----	-----
2	837.1	2,329.3	2,190.0	139.3	-----	-----	-----
3	23.5	144.6	133.6	11.0	-----	-----	-----
4	242.5	936.8	865.5	71.3	-----	-----	-----
5	24.1	228.1	199.7	28.3	21.1	42.4	156.4
6	40.9	352.2	308.5	43.8	34.3	71.5	239.7
7	130.3	1,214.7	961.8	252.8	115.2	224.0	811.8
8	95.4	881.9	797.7	84.1	76.7	151.0	522.4
9	95.4	686.4	621.0	65.4	78.9	173.1	475.4
10	22.6	199.1	180.1	19.0	15.9	34.5	113.5
11	2,926.4	25,061.2	22,885.0	2,176.2	-----	-----	-----
12	1,517.5	11,846.5	10,717.1	1,129.4	-----	-----	-----
13	406.3	4,079.4	3,609.7	469.7	214.8	439.4	1,502.2
14	1,845.2	13,132.8	11,736.2	1,396.6	1,166.5	2,351.8	6,332.5
15	95.2	641.7	510.9	130.8	74.7	141.9	332.2
16	621.8	3,398.4	3,100.5	298.0	535.1	1,118.5	2,363.1
17	123.8	777.3	700.7	76.5	96.7	200.4	460.4
18	1,477.6	6,782.0	6,185.7	596.3	1,277.0	2,324.5	4,602.9
19	176.0	899.0	813.6	85.4	149.7	284.0	594.4
20	535.8	3,074.1	2,782.0	292.1	467.4	921.4	2,181.1
21	31.8	152.4	138.0	14.4	28.3	55.6	109.5
22	304.4	1,667.7	1,516.6	151.0	257.3	513.1	1,101.0
23	130.5	922.3	830.0	92.3	100.2	202.6	552.7
24	456.0	3,862.8	3,453.9	408.9	335.1	713.1	2,237.7
25	225.8	1,625.9	1,461.5	164.3	172.6	358.2	967.9
26	1,069.7	8,202.3	7,509.9	692.4	631.6	1,196.1	4,011.3
27	452.4	4,197.0	3,715.5	481.4	249.6	507.7	1,726.1
28	217.0	2,063.1	1,803.0	260.1	121.3	2,243.3	798.2
29	265.1	2,420.1	2,147.8	272.3	126.9	247.4	752.5
30	72.8	622.4	557.7	64.7	36.3	73.1	223.4
31	208.3	2,591.4	1,969.2	622.2	99.3	202.1	786.4
32	538.9	3,990.9	3,500.9	490.0	410.1	815.5	2,312.5
33	34.0	232.6	208.2	24.4	28.4	56.8	152.9
34	306.6	1,474.7	1,338.0	136.7	264.9	492.4	994.1
35	180.5	1,409.5	1,252.4	157.1	139.6	279.2	866.2
36	452.2	3,366.8	3,013.3	353.5	329.7	669.2	1,917.9
37	969.1	9,120.0	7,798.1	1,321.9	752.2	1,492.3	5,526.0
38	399.0	3,437.8	3,016.9	420.8	296.6	611.0	1,986.3
39	81.9	772.2	664.9	107.2	61.4	132.1	453.2
40	444.9	3,468.5	3,091.5	377.0	341.1	688.2	2,056.4

- continued -

Table 3.--Employment, Compensation, and Related Measures
by 85-Industry I-O Detail, 1967
- continued -

Industry number	All employees				Production workers*		
	Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)
41	348.4	2,969.5	2,610.1	359.5	280.7	576.5	1,878.1
42	488.2	3,635.1	3,250.8	384.3	373.7	764.1	2,153.9
43	105.6	1,004.1	882.1	122.0	72.1	147.1	540.2
44	152.0	1,276.3	1,106.3	170.1	104.0	203.2	662.3
45	197.0	1,701.4	1,487.2	214.1	135.2	269.7	912.6
46	88.8	779.6	697.6	82.1	54.9	113.7	379.0
47	345.1	3,273.4	2,954.6	318.8	256.1	558.0	1,984.5
48	217.9	1,878.8	1,686.4	192.4	141.0	296.4	950.5
49	288.9	2,530.6	2,247.3	283.3	196.6	410.4	1,353.7
50	206.3	1,623.5	1,479.2	144.3	169.9	348.5	1,100.1
51	215.7	1,951.8	1,763.4	188.4	119.7	237.2	757.0
52	146.0	1,138.8	1,013.0	125.8	100.6	203.1	603.5
53	425.7	3,483.7	3,108.9	374.8	276.7	555.3	1,662.3
54	177.9	1,351.7	1,195.1	156.6	135.2	262.1	788.1
55	167.5	1,182.6	1,051.9	130.7	123.1	242.3	641.9
56	690.0	6,186.7	5,538.0	648.8	411.7	812.0	2,566.6
57	439.2	3,131.1	2,801.4	329.6	293.4	576.2	1,448.9
58	114.0	883.9	774.5	109.4	83.7	163.4	499.2
59	849.0	8,463.9	7,149.2	1,314.7	615.4	1,238.9	4,662.5
60	828.4	8,489.9	7,545.8	944.1	489.3	1,047.6	3,792.9
61	310.6	2,469.2	2,198.5	270.7	249.0	493.7	1,588.7
62	259.1	1,953.2	1,765.2	188.0	175.8	349.4	978.2
63	152.6	1,411.8	1,251.8	160.0	90.1	180.8	590.8
64	442.9	2,711.4	2,462.7	248.7	350.9	673.5	1,586.5
65	2,566.0	20,961.0	18,837.4	2,123.6	-----	-----	-----
66	825.8	6,820.3	5,652.7	1,167.6	-----	-----	-----
67	118.9	1,060.2	971.3	88.9	-----	-----	-----
68	540.5	4,900.4	4,264.2	636.2	-----	-----	-----
69	13,268.0	70,286.1	64,955.0	5,331.2	-----	-----	-----
70	2,614.2	19,379.3	17,132.7	2,246.6	-----	-----	-----
71	443.3	1,715.2	1,571.2	144.0	-----	-----	-----
72	1,656.7	6,926.9	6,442.8	484.1	-----	-----	-----
73	2,385.1	16,098.3	14,939.7	1,158.6	-----	-----	-----
75	722.4	3,804.4	3,539.8	264.6	-----	-----	-----
76	562.7	3,053.4	2,835.3	218.1	-----	-----	-----
77	5,025.1	23,292.6	21,659.0	1,633.5	-----	-----	-----
78	875.7	5,779.1	5,352.8	426.3	-----	-----	-----
79	327.1	2,048.8	1,849.8	199.0	-----	-----	-----
85	-5.0	57.0	57.0	.0	-----	-----	-----
86	2,527.0	4,701.0	4,640.0	61.0	-----	-----	-----
97	6,554.8	35,148.3	33,226.2	1,922.1	-----	-----	-----
98	8,139.1	46,835.5	42,033.6	4,801.9	-----	-----	-----
Total	75,331.2	471,915.0	427,490.2	44,424.8	14,405.3	28,750.5	84,302.0

*Production workers are defined only for manufacturing and mining industries.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

In the case of redefinitions into or within manufacturing and mining, estimates of the associated production workers were assumed to be in the same proportion as the receiving industry's proportions of production workers to total employees; hours and wages per production worker were assumed to be equal to the hours and wages per production worker in the receiving industry. FAC workers were assumed to have been classified as nonproduction workers in the Census and therefore no production workers were redefined to construction.

Detailed reconciliation of NIPA and I-O data on employment and employee compensation

A reconciliation of I-O with NIPA estimates of employment and compensation at the major industry division level is provided in table 2. The NIPA data on employment and compensation are published annually at the 2-digit SIC level. To provide the users of the I-O tables a bridge between the published NIPA series and the I-O estimates, a detailed reconciliation of the estimates is provided in Appendix Tables 3 and 4. These tables reconcile the NIPA data at the 2-digit level of detail with the I-O estimates at the 85-industry level of detail, showing the statistical and classification differences, as well as the effect of redefinitions among the I-O industries. The effects of specific redefinitions among industries at the 367-industry I-O level are given in Appendix Table 7. These tables should be helpful to analysts who use the current information in the NIPA accounts for developing employment and related data consistent with updated BEA I-O tables or their own versions of revised I-O tables.

EVALUATION OF THE INDUSTRY ESTIMATES

The evaluation of the estimates of employment and compensation in the I-O industrial detail is as follows:

Agriculture

In this highly seasonal industry, an employment or hours worked measure for total labor (hired and non-hired) would be more useful analytically than the employment estimate which includes only hired workers. In fact, the I-O industry detail of employment in agriculture was derived from the Department of Agriculture's detailed estimates of hours of hired labor. (See Appendix Table 6.) The large seasonal variations in number of migratory workers and other fluctuations in agricultural labor make it difficult to apply a concept of employees by type of agricultural production. The analyst may wish to estimate non-hired employment and hours as well.

Mining

The detailed industry estimates of employment and payroll in mining are based directly on the data in the *1967 Census of Mineral Industries*, scaled upward to reflect the difference between NIPA and Census totals for all mining and manufacturing. The estimates for compensation were made by using the NIPA ratio of supplements to payrolls for mining. Thus, the mining estimates, prior to adjustments for FAC, have a solid statistical base. However, the estimates for FAC redefined out of the Census industry probably contain a fair margin of error. For all the I-O mining industries, FAC accounted for about 12 percent of the employment. About 80 percent of the FAC employment in mining came from oil and gas well drilling performed by integrated producers. Except for oil and gas well drilling, the industrial detail for mining, statistical adjustments, and classification changes are based firmly on Census information which is consistent with the production data for the mining industries.

Construction

The analysis of the construction industry for the I-O table was done in terms of 49 types of new and maintenance construction. This detail is aggregated to seven types of construction in the 367-industry table and two types in the 85-industry table. The initial disaggregation of NIPA figures for compensation in contract construction involved some solid source data and informed judgment. The redefinitions of FAC amount to about one-fourth of the compensation estimate for total construction. The other redefinitions are relatively minor. The use of constant payroll per employee ratios to estimate employment by construction type for contract construction and to estimate employment corresponding to FAC redefinitions, obviously introduces some weaknesses in the most detailed estimates. However, the problem washes out to some extent in the aggregation to five new construction types and two maintenance and repair types.

Manufacturing

The comparison of NIPA and Census data on employment in manufacturing as a whole shows close agreement. The Census detail was used in the I-O study and required no further breakdown, except for CAO's. For the latter, only approximate data existed for the allocation to the more detailed industries. The redefinitions, including those for MSO's and FAC, are relatively small and do not significantly affect the individual estimates of employment and compensation.

However, it should be mentioned that some ambiguity exists in the Census' definition of production workers. The Census questionnaire does not make it sufficiently clear whether FAC workers are included. Some may have been incorrectly reported as production workers. After discussion with Census personnel, it was decided that most were correctly included in nonproduction workers. Thus, redefinitions of FAC out of manufacturing did not remove any production workers. There is probably some error due to this assumption.

Transportation

NIPA data are consistent with the definitions used in the I-O study. There are no NIPA - I-O adjustments and the classification differences within the industry are minor. The redefinitions for FAC and manufacturing activities in the industry are derived indirectly from information published by agencies which regulate transportation. The FAC estimates are judged to be of rather poor quality. Other redefinitions are small and have little impact on the estimates.

Communications and utilities

The information needed to modify the NIPA detail and redefine FAC was available from data published by the agencies which regulate these industries. The estimates are considered to be good for all the component industries except water and sanitary services, for which the FAC estimates are weak.

Trade

No additional industry detail had to be estimated for trade. However, classification changes and redefinitions into and out of trade affect about 12 percent of employment in trade. The redefinition of employment in MSO's and the other specific redefinitions into and out of trade account for the major part of the differences. The MSO employment and payrolls are published by the Census and should be good. The redefinitions of services in trade and trade activities in services are considered poor.

The NIPA and I-0 industry detail are the same and consistent with the I-0 definition of output for these industries. While the redefinition of employment for FAC amounts to about six percent of the total, it is mainly related to the real estate component, for which FAC is especially important. The FAC redefinitions in real estate are considered of poor quality.

Services

The NIPA estimates for employment and compensation largely matched those required for the individual I-0 industry estimates. The FAC estimates were derived indirectly and are considered to be of poor quality, but they are very small for individual industries and in total. Other redefinitions in and out of services are largely the counterpart of those in trade, as discussed above.

Employee compensation compared with value added

The estimates of employee compensation presented in this report were compared to value added at the 367- and 484-industry levels. Most of the ratios of employee compensation to value added for the 367-order industries, shown in Appendix Table 5, appear to be reasonable.

However, in some cases--mainly in manufacturing--the ratios are unreasonably high and for five of the manufacturing industries at the 367-industry level (I-0's 13.04, 17.05, 56.02, 57.02, and 61.01) employee compensation exceeds value added. At the 484-industry level, where the ratio exceeded 0.9 (41 cases, excluding government enterprises) or was less than 0.1 (eight cases), the compensation estimates were reviewed to verify that the methodology used to make the I-0 estimates did not distort the Census data upon which they were based. The industries where high ratios appear usually constitute a relatively small portion of the 85-order industry in which they are included and hence have little effect on the ratios at this level of detail. The low ratios occur in agriculture and real estate.

The high ratios apparently stem from the lack of adequate data used to estimate value added and intermediate inputs for mining and manufacturing industries. To an important extent, value added for an industry was derived residually, as gross output less the sum of intermediate inputs. Value added guides, based on NIPA data, existed only at the 85-industry level. Therefore, errors in the estimation of intermediate inputs affect the value added total. This difficulty manifests itself glaringly in a few cases, for which the *Census of Manufactures, 1967* payroll total, even without adjustment for CAO's, exceeds the I-0 value added.

However, the detailed compensation and employment estimates in Appendix Table 5 are consistent with total output as defined in the 1967 I-0 tables, using published data from the economic censuses and other Federal sources. Therefore, these estimates are considered useful with the I-0 output data. 10/

10. The industry output data for the revised I-0 study for 1967 at the 85-industry level are available in BEA Staff Paper No. 29. The revised 367- and 484-industry tables are available only on computer tape. However, the 367-industry table from the original 1967 study has been published and the output totals differ very little from those in the revised table. The only industry which shows a substantial change is computing and related machines, for which output and final demand were reduced by \$515 million and value added by \$200 million. Hence, the published 367-industry table can be considered consistent with industry employment and compensation estimates produced in this report.

Appendix Table 1
Industry Classification of the 1967 Input-Output Tables

The titles in bold face represent the groupings of industries used for the summary version of the 1967 tables and were also used in the 1958 and 1963 input-output tables prepared by the Bureau of Economic Analysis.

Industry number and title	Related Census-SIC codes (1967 edition)	Industry number and title	Related Census-SIC codes (1967 edition)
AGRICULTURE, FORESTRY, AND FISHERIES		12. 02 Maintenance and repair construction, all other.	pt. 15, pt. 16, pt. 17, pt. 138.
1 Livestock and livestock products		MANUFACTURING	
1. 01 Dairy farm products-----	0132, pt. 014.	13 Ordnance and accessories	
1. 02 Poultry and eggs-----	0133, 0134, pt. 014.	13. 01 Complete guided missiles-----	1925.
1. 03 Meat animals and miscellaneous livestock products.	0135, 0136, 0139, pt. 014, 0193, pt. 0729.	13. 02 Ammunition, except for small arms, n.e.c.	1929.
2 Other agricultural products		13. 03 Tanks and tank components-----	1931.
2. 01 Cotton-----	0112, pt. 014.	13. 04 Sighting and fire control equipment--	1941.
2. 02 Food feed grains and grass seeds----	0113, pt. 0119, pt. 014.	13. 05 Small arms-----	1951.
2. 03 Tobacco-----	pt. 0114, pt. 014.	13. 06 Small arms ammunition-----	1961.
2. 04 Fruits and tree nuts-----	0122, pt. 014.	13. 07 Other ordnance and accessories-----	1911, 1999.
2. 05 Vegetables, sugar, and miscellaneous crops.	0123, pt. 0119, pt. 014.	14 Food and kindred products	
2. 06 Oil bearing crops-----	pt. 0113, pt. 0119, pt. 014.	14. 01 Meat products-----	201.
2. 07 Forest, greenhouse, and nursery products.	0192, pt. 014.	14. 02 Creamery butter-----	2021.
3 Forestry and fishery products		14. 03 Cheese, natural and processed-----	2022.
3. 00 Forestry and fishery products-----	074, 081, 082, 084, 086, 091.	14. 04 Condensed and evaporated milk-----	2023.
4 Agricultural, forestry, and fishery services		14. 05 Ice cream and frozen desserts-----	2024.
4. 00 Agricultural, forestry, and fishery services.	071, 0723, 073, pt. 0729, 085, 098.	14. 06 Fluid milk-----	2026.
MINING		14. 07 Canned and cured sea foods-----	2031.
5 Iron and ferroalloy ores mining		14. 08 Canned specialties-----	2032.
5. 00 Iron and ferroalloy ores mining-----	1011, 106.	14. 09 Canned fruits and vegetables-----	2033.
6 Nonferrous metal ores mining		14. 10 Dehydrated food products-----	2034.
6. 01 Copper ore mining-----	102.	14. 11 Pickles, sauces, and salad dressings--	2035.
6. 02 Nonferrous metal ores mining, except copper.	103, 104, 105, 108, 109.	14. 12 Fresh or frozen packaged fish-----	2036.
7 Coal mining		14. 13 Frozen fruits and vegetables-----	2037.
7. 00 Coal mining-----	11, 12.	14. 14 Flour and cereal preparations-----	2041, 2043, 2045.
8 Crude petroleum and natural gas		14. 15 Prepared feeds for animals and fowls--	2042.
8. 00 Crude petroleum and natural gas----	1311, 1321.	14. 16 Rice milling-----	2044.
9 Stone and clay mining and quarrying		14. 17 Wet corn milling-----	2046.
9. 00 Stone and clay mining and quarrying.	141, 142, 144, 145, 148, 149.	14. 18 Bakery products-----	205.
10 Chemicals and fertilizer mineral mining		14. 19 Sugar-----	206.
10. 00 Chemical and fertilizer mineral mining.	147.	14. 20 Confectionery and related products--	207.
CONSTRUCTION		14. 21 Alcoholic beverages-----	2082-5.
11 New construction		14. 22 Bottled and canned soft drinks-----	2086.
11. 01 New construction, residential buildings (nonfarm).	pt. 15, pt. 16, pt. 17, pt. 6561.	14. 23 Flavoring extracts and sirups, n.e.c.	2087.
11. 02 New construction, nonresidential buildings.	pt. 15, pt. 17.	14. 24 Cottonseed oil mills-----	2091.
11. 03 New construction, public utilities--	pt. 15, pt. 16, pt. 17.	14. 25 Soybean oil mills-----	2092.
11. 04 New construction, highways-----	pt. 16, pt. 17.	14. 26 Vegetable oil mills, n.e.c-----	2093.
11. 05 New construction, all other-----	pt. 15, pt. 16, pt. 17, pt. 138.	14. 27 Animal and marine fats and oils----	2094.
12 Maintenance and repair construction		14. 28 Roasted coffee-----	2095.
12. 01 Maintenance and repair construction, residential buildings (non-farm).	pt. 15, pt. 17.	14. 29 Shortening and cooking oils-----	2096.
		14. 30 Manufactured ice-----	2097.
		14. 31 Macaroni and spaghetti-----	2098.
		14. 32 Food preparations, n.e.c-----	2099.
		15 Tobacco manufactures	
		15. 01 Cigarettes, cigars, etc-----	2111, 2121, 2131.
		15. 02 Tobacco stemming and redrying-----	2141.
		16 Broad and narrow fabrics, yarn and thread mills	
		16. 01 Broadwoven fabric mills and fabric finishing plants.	2211, 2221, 2231, 2261, 2262.
		16. 02 Narrow fabric mills-----	2241.
		16. 03 Yarn mills and finishing of textiles, n.e.c.	2269, 2281-3.
		16. 04 Thread mills-----	2284.
		17 Miscellaneous textile goods and floor coverings	
		17. 01 Floor coverings-----	227.
		17. 02 Felt goods, n.e.c-----	2291.
		17. 03 Lace goods-----	2292.
		17. 04 Paddings and upholstery fillings-----	2293.
		17. 05 Processed textile waste-----	2294.
		17. 06 Coated fabrics, not rubberized-----	2295.
		17. 07 Tire cord and fabric-----	2296.
		17. 08 Scouring and combing plants-----	2297.
		17. 09 Cordage and twine-----	2298.
		17. 10 Textile goods, n.e.c-----	2299.
		18 Apparel	
		18. 01 Hosiery-----	2251, 2252.
		18. 02 Knit apparel mills-----	2253, 2254, 2259.
		18. 03 Knit fabric mills-----	2256.
		18. 04 Apparel made from purchased materials.	23 (excl. 239), 39996.
		19 Miscellaneous fabricated textile products.	
		19. 01 Curtains and draperies-----	2391.

Appendix Table 1

Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title		Related Census-SIC codes (1967 edition)	Industry number and title		Related Census-SIC codes (1967 edition)
19. 02	Housefurnishings, n.e.e.....	2392.	31 Petroleum refining and related industries		
19. 03	Fabricated textile products, n.e.c..	2393-9.	31. 01	Petroleum refining and related products.	2911, 299.
20 Lumber and wood products, except containers			31. 02	Paving mixtures and blocks.....	2951.
20. 01	Logging camps and logging contractors.	2411.	31. 03	Asphalt felts and coatings.....	2952.
20. 02	Sawmills and planing mills, general.	2421.	32 Rubber and miscellaneous plastics products		
20. 03	Hardwood dimensions and flooring.	2426.	32. 01	Tires and inner tubes.....	3011.
20. 04	Special product sawmills, n.e.c....	2429.	32. 02	Rubber footwear.....	3021.
20. 05	Millwork.....	2431.	32. 03	Reclaimed rubber and miscellaneous rubber products, n.e.c.	3031, 3069.
20. 06	Veneer and plywood.....	2432.	32. 04	Miscellaneous plastics products.....	3079.
20. 07	Prefabricated wood structures.....	2433.	33 Leather tanning and industrial leather products		
20. 08	Wood preserving.....	2491.	33. 00	Leather tanning and industrial leather products.	3111, 3121.
20. 09	Wood products, n.e.c.....	2499.	34 Footwear and other leather products		
21 Wooden containers			34. 01	Footwear cut stock.....	3131.
21. 00	Wooden containers.....	244.	34. 02	Footwear except rubber.....	314.
22 Household furniture			34. 03	Other leather products.....	3151, 3161, 317, 3199.
22. 01	Wood household furniture.....	2511, 2519.	35 Glass and glass products		
22. 02	Upholstered household furniture...	2512.	35. 01	Glass and glass products except containers.	3211, 3229, 3231.
22. 03	Metal household furniture.....	2514.	35. 02	Glass containers.....	3221.
22. 04	Mattresses and bedsprings.....	2515.	36 Stone and clay products		
23 Other furniture and fixtures			36. 01	Cement, hydraulic.....	3241.
23. 01	Wood office furniture.....	2521.	36. 02	Brick and structural clay tile.....	3251.
23. 02	Metal office furniture.....	2522.	36. 03	Ceramic wall and floor tile.....	3253.
23. 08	Public building furniture.....	2531.	36. 04	Clay refractories.....	3255.
23. 04	Wood partitions and fixtures.....	2541.	36. 05	Structural clay products, n.e.c.....	3259.
23. 05	Metal partitions and fixtures.....	2542.	36. 06	Vitreous plumbing fixtures.....	3261.
23. 06	Venetian blinds and shades.....	2591.	36. 07	Food utensils, pottery.....	3262, 3263.
23. 07	Furniture and fixtures, n.e.c.....	2599.	36. 08	Porcelain electrical supplies.....	3264.
24 Paper and allied products except containers and boxes			36. 09	Pottery products, n.e.c.....	3269.
24. 01	Pulp mills.....	2611.	36. 10	Concrete block and brick.....	3271.
24. 02	Paper mills, except building paper..	2621.	36. 11	Concrete products, n.e.c.....	3272.
24. 03	Paperboard mills.....	2631.	36. 12	Ready-mixed concrete.....	3273.
24. 04	Envelopes.....	2642.	36. 13	Lime.....	3274.
24. 05	Sanitary paper products.....	2647.	36. 14	Gypsum products.....	3275.
24. 06	Wallpaper and building paper and board mills.	2644, 2661.	36. 15	Cut stone and stone products.....	3281.
24. 07	Converted paper, products, n.e.c., except containers and boxes.	2641, 2643, 2645, 2646, 2649.	36. 16	Abrasive products.....	3291.
25 Paperboard containers and boxes			36. 17	Asbestos products.....	3292.
25. 00	Paperboard containers and boxes..	265.	36. 18	Gaskets and insulation.....	3293.
26 Printing and publishing			36. 19	Minerals, ground or treated.....	3295.
26. 01	Newspapers.....	2711.	36. 20	Mineral wool.....	3296.
26. 02	Periodicals.....	2721.	36. 21	Nonclay refractories.....	3297.
26. 03	Book printing and publishing.....	273.	36. 22	Nonmetallic mineral products, n.e.c.	3299.
26. 04	Miscellaneous publishing.....	2741.	37 Primary iron and steel manufacturing		
26. 05	Commercial printing.....	2751, 2752.	37. 01	Blast furnaces and basic steel products.	331.
26. 06	Manifold business forms, blank-books, and binders.	2761, 2782.	37. 02	Iron and steel foundries.....	332.
26. 07	Greeting card publishing.....	2771.	37. 03	Iron and steel forgings.....	3391.
26. 08	Miscellaneous printing services.....	2753, 2789, 279.	37. 04	Primary metal products, n.e.c.....	3399.
27 Chemicals and selected chemical products			38 Primary nonferrous metals manufacturing		
27. 01	Industrial inorganic and organic chemicals.	281 (excl. 28195.)	38. 01	Primary copper.....	3331.
27. 02	Fertilizers.....	2871, 2872.	38. 02	Primary lead.....	3332.
27. 03	Agricultural chemicals, n.e.c.....	2879.	38. 03	Primary zinc.....	3333.
27. 04	Miscellaneous chemical products...	2861, 289.	38. 04	Primary aluminum.....	3334, 28195.
28 Plastics and synthetic materials			38. 05	Primary nonferrous metals, n.e.c.....	3339.
28. 01	Plastics materials and resins.....	2821.	38. 06	Secondary nonferrous metals.....	3341.
28. 02	Synthetic rubber.....	2822.	38. 07	Copper rolling and drawing.....	3351.
28. 03	Cellulosic man-made fibers.....	2823.	38. 08	Aluminum rolling and drawing.....	3352.
28. 04	Organic fibers, noncellulosic.....	2824.	38. 09	Nonferrous rolling and drawing, n.e.c.	3356.
29 Drugs, cleaning and toilet preparations			38. 10	Nonferrous wire drawing and insulating.	3357.
29. 01	Drugs.....	283.	38. 11	Aluminum castings.....	3361.
29. 02	Cleaning preparations.....	284 (excl. 2844.)	38. 12	Brass, bronze, and copper castings..	3362.
29. 03	Toilet preparations.....	2844.	38. 13	Nonferrous castings, n.e.c.....	3369.
30 Paints and allied products			38. 14	Nonferrous forgings.....	3392.
30. 00	Paints and allied products.....	2851.	39 Metal containers		
			39. 01	Metal cans.....	3411.
			39. 02	Metal barrels, drums, and pails...	3491.
			40 Heating, plumbing, and fabricated structural metal products		
			40. 01	Metal sanitary ware.....	3431.
			40. 02	Plumbing fittings and brass goods...	3432.

Appendix Table 1

Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title		Related Census-SIC codes (1967 edition)	Industry number and title		Related Census-SIC codes (1967 edition)
40.03	Heating equipment, except electric	3433.	51.02	Typewriters	3572.
40.04	Fabricated structural steel	3441.	51.03	Scales and balances	3576.
40.05	Metal doors, sash, and trim	3442.	51.04	Office machines, n.e.c.	3579.
40.06	Fabricated plate work (boiler shops)	3443.			
40.07	Sheet metal work	3444.	52 Service industry machines		
40.08	Architectural metal work	3446.	52.01	Automatic merchandising machines	3581.
40.09	Miscellaneous metal work	3449.	52.02	Commercial laundry equipment	3582.
			52.03	Refrigeration machinery	3585.
			52.04	Measuring and dispensing pumps	3586.
			52.05	Service industry machines, n.e.c.	3589.
41 Screw machine products, bolts, nuts, etc. and metal stampings					
41.01	Screw machine products and bolts, nuts, rivets, and washers	345.	53 Electric transmission and distribution equipment and electrical industrial apparatus		
41.02	Metal stampings	3461.	53.01	Electric measuring instruments	3611.
			53.02	Transformers	3612.
42 Other fabricated metal products			53.03	Switchgear and switchboard apparatus	3613.
42.01	Cutlery	3421.	53.04	Motors and generators	3621.
42.02	Hand and edge tools including saws	3423, 3425.	53.05	Industrial controls	3622.
42.03	Hardware, n.e.c.	3429.	53.06	Welding apparatus	3623.
42.04	Coating, engraving, and allied services	3471, 3479.	53.07	Carbon and graphite products	3624.
42.05	Miscellaneous fabricated wire products	3481.	53.08	Electrical industrial apparatus, n.e.c.	3629.
42.06	Safes and vaults	3492.			
42.07	Steel springs	3493.	54 Household appliances		
42.08	Pipe, valves, and pipe fittings	3494, 3498.	54.01	Household cooking equipment	3631.
42.09	Collapsible tubes	3496.	54.02	Household refrigerators and freezers	3632.
42.10	Metal foil and leaf	3497.	54.03	Household laundry equipment	3633.
42.11	Fabricated metal products, n.e.c.	3499.	54.04	Electric housewares and fans	3634.
			54.05	Household vacuum cleaners	3635.
43 Engines and turbines			54.06	Sewing machines	3636.
43.01	Steam engines and turbines	3511.	54.07	Household appliances, n.e.c.	3639.
43.02	Internal combustion engines, n.e.c.	3519.			
44 Farm machinery			55 Electric lighting and wiring equipment		
44.00	Farm machinery	3522.	55.01	Electric lamps	3641.
			55.02	Lighting fixtures	3642.
45 Construction, mining, oil field machinery equipment			55.03	Wiring devices	3643, 3644.
45.01	Construction machinery	3531.			
45.02	Mining machinery	3532.	56 Radio, television and communication equipment		
45.03	Oil field machinery	3533.	56.01	Radio and television receiving sets	3651.
			56.02	Phonograph records	3652.
46 Materials handling machinery and equipment			56.03	Telephone and telegraph apparatus	3661.
46.01	Elevators and moving stairways	3534.	56.04	Radio and television communication equipment	3662.
46.02	Conveyors and conveying equipment	3535.			
46.03	Hoists, cranes, and monorails	3536.	57 Electronic components and accessories		
46.04	Industrial trucks and tractors	3537.	57.01	Electron tubes	3671, 3672, 3673.
			57.02	Semiconductors	3674.
			57.03	Electronic components, n.e.c.	3679.
47 Metalworking machinery and equipment					
47.01	Machine tools, metal cutting types	3541.	58 Miscellaneous electrical machinery, equipment and supplies		
47.02	Machine tools, metal forming types	3542.	58.01	Storage batteries	3691.
47.03	Special dies and tools and machine tool accessories	3544, 3545.	58.02	Primary batteries, wet and dry	3692.
47.04	Metalworking machinery, n.e.c.	3548.	58.03	X-ray apparatus and tubes	3693.
			58.04	Engine electrical equipment	3694.
			58.05	Electrical equipment, n.e.c.	3699.
48 Special industry machinery and equipment					
48.01	Food products machinery	3551.	59 Motor vehicles and equipment		
48.02	Textile machinery	3552.	59.01	Truck and bus bodies	3713.
48.03	Woodworking machinery	3553.	59.02	Truck trailers	3715.
48.04	Paper industries machinery	3554.	59.03	Motor vehicles and parts	3711, 3714.
48.05	Printing trades machinery	3555.			
48.06	Special industry machinery, n.e.c.	3559.	60 Aircraft and parts		
			60.01	Aircraft	3721.
49 General industrial machinery and equipment			60.02	Aircraft engines and parts	3722.
49.01	Pumps and compressors	3561.	60.03	Aircraft propellers and parts	37295.
49.02	Ball and roller bearings	3562.	60.04	Aircraft equipment, n.e.c.	3729 (excl. 37295).
49.03	Blowers and fans	3564.			
49.04	Industrial patterns	3565.	61 Other transportation equipment		
49.05	Power transmission equipment	3566.	61.01	Shipbuilding and repairing	3731.
49.06	Industrial furnaces and ovens	3567.	61.02	Boatbuilding and repairing	3732.
49.07	General industrial machinery, n.e.c.	3569.	61.03	Locomotives and parts	3741.
			61.04	Railroad and street cars	3742.
50 Machine shop products			61.05	Motorcycles, bicycles and parts	3751.
50.00	Machine shop products	359.	61.06	Trailer coaches	3791.
			61.07	Transportation equipment, n.e.c.	3799.
51 Office, computing, and accounting machines					
51.01	Computing and related machines	3573, 3574.	62 Professional, scientific and controlling instruments, and supplies		
			62.01	Engineering and scientific instruments	3811.

Appendix Table 1
Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title		Related Census-SIC codes (1967 edition)	Industry number and title		Related Census-SIC codes (1967 edition)
62. 02	Mechanical measuring devices.....	3821.	SERVICES		
62. 03	Automatic temperature controls.....	3822.	72 Hotels and lodging places, personal and repair services, except automobile repair		
62. 04	Surgical and medical instruments.....	3841.	72. 01	Hotels and lodging places.....	70.
62. 05	Surgical appliances and supplies.....	3842.	72. 02	Personal and repair services except auto repair and barber and beauty shops.	72 (excl. 723, 724) 76 (excl. 7692, 7694, and pt. 7699).
62. 06	Dental equipment and supplies.....	3843.	72. 03	Barber and beauty shops.....	723, 724.
62. 07	Watches, clocks and parts.....	387.	73 Business services		
63 Optical, ophthalmic and photographic equipment and supplies			73. 01	Miscellaneous business services.....	73 (excl. 731, 7396), 7692, 7694, pt. 7699.
63. 01	Optical instruments and lenses.....	3831.	73. 02	Advertising.....	731.
63. 02	Ophthalmic goods.....	3851.	73. 03	Miscellaneous professional services.....	81, 89 (excl. 8921).
63. 03	Photographic equipment and supplies.	3861.	74 Research and development		
64 Miscellaneous manufacturing			Eliminated as a separate industry in the 1963 study. Research and development performed for sale is distributed to the purchaser by each of the industries performing the research and development.		
64. 01	Jewelry, including costume, and silverware.	391, 3961.	75 Automobile repair and services		
64. 02	Musical instruments and parts.....	3931.	75. 00	Automobile repair and services.....	75.
64. 03	Games, toys, etc.....	3941, 3942, 3943.	76 Amusements		
64. 04	Sporting and athletic goods, n.e.c.....	3949.	76. 01	Motion pictures.....	78.
64. 05	Pens, pencils, etc.....	395.	76. 02	Amusement and services.....	79.
64. 06	Artificial flowers.....	3962.	77 Medical, educational services, and nonprofit organizations		
64. 07	Buttons, needles, pins and fasteners.....	3963, 3964.	77. 01	Doctors and dentists.....	801, 802, 803, 804.
64. 08	Brooms and brushes.....	3991.	77. 02	Hospitals.....	8061.
64. 09	Hard surface floor covering.....	3996.	77. 03	Other medical and health services.....	0722, 807, 809. (excl. pt. 8099)
64. 10	Morticians goods.....	3994.	77. 04	Educational services.....	82.
64. 11	Signs and advertising displays.....	3993.	77. 05	Nonprofit organizations.....	84, 86, 8921.
64. 12	Miscellaneous manufactures, n.e.c.....	3999 (excl. 39996).	GOVERNMENT ENTERPRISES		
TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES			78 Federal Government enterprises		
65 Transportation and warehousing			78. 01	Post Office.....	
65. 01	Railroads and related services.....	40, 474.	78. 02	Federal electric utilities.....	
65. 02	Local, suburban and interurban highway passenger transportation.	41.	78. 03	Commodity Credit Corporation.....	
65. 03	Motor freight transportation and warehousing.	42, 473.	78. 04	Other Federal Government enterprises.	
65. 04	Water transportation.....	44.	79 State and local government enterprises		
65. 05	Air transportation.....	45.	79. 01	Local government passenger transit.....	
65. 06	Pipe line transportation.....	46.	79. 02	State and local electric utilities.....	
65. 07	Transportation services.....	47, (excl. 473, 474.).	79. 03	Other state and local government enterprises.	
66 Communications, except radio and television broadcasting			IMPORTS		
66. 00	Communications, except radio and television.	48, (excl. 483).	80 Gross imports of goods and services		
67 Radio and television broadcasting			80. 01	Directly allocated imports.....	
67. 00	Radio and television broadcasting.....	483.	80. 02	Transferred imports.....	
68 Electric, gas, water and sanitary services			DUMMY INDUSTRIES		
68. 01	Electric utilities.....	491, pt. 493.	81 Business travel, entertainment and gifts		
68. 02	Gas utilities.....	492, pt. 493.	81. 00	Business travel, entertainment and gifts.	
68. 03	Water and sanitary services.....	494, 495, 496, 497, pt. 493.	82 Office supplies		
WHOLESALE AND RETAIL TRADE			82. 00	Office supplies.....	
69 Wholesale and retail trade			83 Scrap, used and secondhand goods		
69. 01	Wholesale trade.....	50 (excl. manufacturers' sales offices).	83. 00	Scrap, used and secondhand goods.....	
69. 02	Retail trade.....	52, 53, 54, 55, 56, 57, 58, 59, 7396, pt. 8099.	SPECIAL INDUSTRIES		
FINANCE, INSURANCE AND REAL ESTATE			84 Government industry		
70 Finance and insurance			84. 00	Government industry.....	
70. 01	Banking.....	60.	85 Rest of the world industry		
70. 02	Credit agencies.....	61, 67.	85. 00	Rest of the world industry.....	
70. 03	Security and commodity brokers.....	62.	86 Household industry		
70. 04	Insurance carriers.....	63.	86. 00	Household industry.....	
70. 05	Insurance agents and brokers.....	64.			
71 Real estate and rental					
71. 01	Owner-occupied dwellings.....				
71. 02	Real estate.....	65 (excl. pt. 6561), 66.			

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Appendix Table 1
Industry Classification of the 1967 Input-Output Tables--Continued

Industry number and title	Related Census-- SIC codes (1967 edition)
<u>87 Inventory valuation adjustment</u>	
87.00	Inventory valuation adjustment -----
88.00	Total intermediate output -----
<u>Personal consumption expenditures</u>	
91.00	Personal consumption expenditures -----
<u>Gross private fixed capital formation</u>	
92.00	Gross private fixed capital formation -----
<u>Net inventory change</u>	
93.00	Net inventory change -----
<u>Net exports</u>	
94.00	Net exports -----
<u>Federal Government purchases</u>	
97.10	Federal Government purchases, defense -----
	Federal Government purchases, other -----
<u>State and local government purchases</u>	
98.60	State and local government purchases, education -----
98.70	State and local government purchases, health, welfare and sanitation -----
98.80	State and local government purchases, safety -----
98.90	State and local government purchases, other -----
99.02	Total final demand -----
99.03	Total output -----
99.04	Transfers-out -----
I	Total intermediate inputs -----
V.A.	Value added -----
T	Total inputs -----
TR	Transfers-in -----

Appendix Table 2
Employment, Employee Compensation, and Related Measures, by I-O Group, 1967

Industry	All employees				Production workers*		
	Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (million)	Wages (mil.\$)
Agriculture -----	1,552.0	4,710.4	4,411.1	299.3	-----	-----	-----
Mining -----	408.7	3,562.3	3,068.9	493.5	342.1	696.5	2,319.2
Construction -----	4,443.9	36,907.7	33,602.1	3,305.6	-----	-----	-----
Manufacturing -----	19,779.3	153,866.8	136,447.5	17,419.2	14,063.2	28,054.0	81,982.8
Transportation -----	2,566.0	20,961.0	18,837.4	2,123.6	-----	-----	-----
Communications and utilities -----	1,485.1	12,780.9	10,888.2	1,892.7	-----	-----	-----
Trade -----	13,268.0	70,286.1	64,955.0	5,331.2	-----	-----	-----
Finance, insurance, real estate --	3,057.5	21,094.5	18,703.9	2,390.6	-----	-----	-----
Services -----	12,879.0	57,876.6	54,056.7	3,819.9	-----	-----	-----
Enterprises -----	1,202.8	7,827.9	7,202.6	625.3	-----	-----	-----
Government and rest-of-the-world -	14,688.8	82,040.8	75,316.9	6,723.9	-----	-----	-----
Total -----	75,331.2	471,915.0	427,490.2	44,424.8	14,405.3	28,750.5	84,302.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Appendix Table 3
Reconciliation of National Income and Product (NIPA) and Input-Output (I-O) Employment by Industry, 1967
(Thousands of full- and part-time employees)

Industry number SIC	I-O	NIPA (1)	NIPA- I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classification changes (4)	Redefinitions			I-O (9)*
						MSO (5)	Force account (6)	Other Out (7)	In (8)
1	1	1,286.0	.0	---	---	---	---	---	---
7 to 9	2	261.0	.0	448.9	.0	.0	.0	.0	448.9
	3			837.1	.0	.0	.0	.0	837.1
10	4	80.0	-8.3	---	---	---	---	---	---
	5			23.5	.0	.0	.0	.0	23.5
	6			237.5	-22.7	.0	.0	27.6	242.5
11,12	7	139.0	-5.9	---	---	---	-2.8	.0	.0
13	8	275.0	-27.3	44.8	.0	.0	-3.9	.0	.0
14	9	119.0	2.3	133.1	.0	.0	-2.8	.0	.0
15 to 17	10	3,344.0	-26.5	247.7	-107.3	.0	-45.0	.0	.0
	11			---	---	---	---	---	---
	12			97.2	.0	.0	-1.8	.0	.0
	13			24.1	.0	.0	-1.4	.0	.0
19+37-371	14	1,460.0	-1,053.0 ^{2/}	---	---	---	---	---	---
20	15	1,790.0	-44.3	2,487.5	83.3	.0	438.0	-135.5	53.1
21	16	86.0	-1.9	830.0	24.1	.0	663.4	.0	.0
22,23	17	2,356.0	-2.2	407.0	.0	.0	-.7	.0	.0
	18			1,745.7	.0	32.0	-7.3	.0	74.8
	19			84.1	.0	.3	-2	.0	11.1
24	20	603.0	-34.8	---	---	---	---	---	---
	21			599.0	.0	5.9	-1.5	.0	18.4
	22			121.0	.0	2.1	-.3	.0	1.1
25	23	452.0	-17.1	1,458.2	.0	4.9	-.8	.0	15.4
	24			175.6	.0	.5	-.1	.0	.0
	25			---	---	---	---	---	---
	26	680.0	-1.5	536.3	.0	2.2	-2.7	.0	.0
				31.9	.0	.0	.0	.0	.0
				---	---	---	---	---	---
				304.6	.0	.4	-.5	.0	.0
				130.4	.0	.5	-.4	.0	.0
				---	---	---	---	---	---
				454.7	.0	5.2	-3.9	.0	.0
				223.8	.0	2.7	-.8	.0	.0

*The entries in column (9) are the sum of the entries in columns (3) through (8).

Appendix Table 3

Reconciliation of National Income and Product (NIPA) and Input-Output (I-O) Employment by Industry, 1967
(Thousands of full- and part-time employees)
- continued -

Industry number SIC	I-O	NIPA (1)	NIPA- I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classification changes (4)	Redefinitions				I-O (9)*
						MSO (5)	Force account (6)	Out (7)	In (8)	
27	26	1,059.0	5.2	1,064.2	.0	8.0	-2.5	.0	.0	1,069.7
28	27	1,001.0	-7.0	994.0	-.0	14.8	-4.5	-9.3	-.0	984.7
	28			214.9	.0	4.4	-2.3	.0	.0	217.0
	29			257.0	.0	9.6	-1.5	.0	.0	265.1
	30			70.8	.0	2.4	-.4	.0	.0	72.8
29	31	180.0	33.2	213.2	.0	1.1	-6.0	.0	.0	208.3
30	32	515.0	22.1	537.1	.0	3.3	-1.5	.0	.0	538.9
31	33	352.0	-11.5	340.5	-.0	-.2	-.1	.0	-.0	34.0
	34			306.6	.0	.3	-.2	.0	.0	306.6
32	35	634.0	-6.3	627.7	-.0	2.9	-.8	.0	.0	180.5
	36			449.4	.0	5.3	-2.5	.0	.0	452.2
33	37	1,325.0	19.4	1,344.4	-.0	16.4	-5.5	.0	.0	969.1
	38			386.1	.0	6.4	-2.8	.0	9.3	399.0
34	39	1,358.0	32.8	1,390.8	-.0	-.0	-.2	.0	-.0	81.9
	40			471.2	.0	1.7	-1.4	-26.6	.0	444.9
	41			349.1	.0	.3	-1.0	.0	.0	348.4
	42			488.4	.0	1.0	-1.2	.0	.0	488.2
35	43	1,976.0	-24.4	1,951.6	-.0	2.2	-.4	.0	.0	105.6
	44			151.7	.0	.7	-.4	.0	.0	152.0
	45			197.4	.0	.2	-.7	.0	.0	197.0
	46			89.0	.0	1.5	-.2	-1.6	.0	88.8
	47			343.6	.0	2.4	-.9	.0	.0	345.1
	48			215.1	.0	3.4	-.6	.0	.0	217.9
	49			289.4	.0	2.0	-.8	-1.6	.0	288.9
	50			205.3	.0	.0	-.3	.0	1.4	206.3
	51			211.1	.0	12.6	-.5	-7.6	.0	215.7
	52			145.1	.0	1.7	-.4	-.4	.0	146.0

*The entries in column (9) are the sum of the entries in columns (3) through (8).

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Appendix Table 3
Reconciliation of National Income and Product (NIPA) and Input-Output (I-0) Employment by Industry, 1967
(Thousands of full- and part-time employees)
- continued -

Industry number SIC	I-0	NIPA (1)	NIPA- I-0 adjust- ments (2)	Adjusted NIPA, by I-0 industry (3)	I-0 - SIC classification changes (4)	Redefinitions			I-0 (9)*
						MSO (5)	Force account (6)	Other Out (7) In (8)	
36		1,968.0	35.4	----- 420.9 178.4 166.1 687.3 437.1 113.6 826.7 ----- 830.1 300.9 ----- 262.0 152.3 434.1 2,661.0 874.5 119.0 646.0 13,862.0 2,617.0 665.0 1,966.0 2,090.0 347.0 621.0 4,972.0	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 13.5 .0 .0 -107.6 ^{4/} -15.3 ^{3/} .0 -0.5 ^{5/} 132.0 ^{5/}	----- 5.8 .0 1.8 4.1 3.0 .7 10.3 ----- .6 .8 ----- 2.0 1.1 2.2 .0 .0 .0 .0 -193.4 .0 .0 -210.2 -4.6 -1.7 -1.5 -3.9 .0	----- -1.1 -5 -3 -1.4 -9 -3 -1.9 ----- -2.3 -9 ----- -5 -7 -7 -91.8 -48.6 -1 -105.5 -6.5 -2.8 -210.2 -4.6 -1.7 -1.5 -3.9 -7.3	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 503.8 .0 7.0 175.8 318.8 389.2 9.0 6.4	----- 425.7 177.9 167.5 690.0 439.2 114.0 849.0 ----- 828.4 310.6 ----- 259.1 152.6 442.9 2,566.0 825.8 118.9 540.5 13,268.0 2,614.2 443.3 1,656.7 2,385.1 722.4 562.7 5,025.1
371 37-371		831.0 .0	-4.3 ^{2/} 1,131.0 ^{2/}	----- 830.1 300.9 ----- 262.0 152.3 434.1 2,661.0 874.5 119.0 646.0 13,862.0 2,617.0 665.0 1,966.0 2,090.0 347.0 621.0 4,972.0	----- .0 .0 ----- .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 13.5 .0 .0 -107.6 ^{4/} -15.3 ^{3/} .0 -0.5 ^{5/} 132.0 ^{5/}	----- 5.8 .0 1.8 4.1 3.0 .7 10.3 ----- .6 .8 ----- 2.0 1.1 2.2 .0 .0 .0 .0 -193.4 .0 .0 -210.2 -4.6 -1.7 -1.5 -3.9 .0	----- -1.1 -5 -3 -1.4 -9 -3 -1.9 ----- -2.3 -9 ----- -5 -7 -7 -91.8 -48.6 -1 -105.5 -6.5 -2.8 -210.2 -4.6 -1.7 -1.5 -3.9 -7.3	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 503.8 .0 7.0 175.8 318.8 389.2 9.0 6.4	----- 425.7 177.9 167.5 690.0 439.2 114.0 849.0 ----- 828.4 310.6 ----- 259.1 152.6 442.9 2,566.0 825.8 118.9 540.5 13,268.0 2,614.2 443.3 1,656.7 2,385.1 722.4 562.7 5,025.1
38		446.0	-31.7	----- 262.0 152.3 434.1 2,661.0 874.5 119.0 646.0 13,862.0 2,617.0 665.0 1,966.0 2,090.0 347.0 621.0 4,972.0	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 13.5 .0 .0 -107.6 ^{4/} -15.3 ^{3/} .0 -0.5 ^{5/} 132.0 ^{5/}	----- 5.8 .0 1.8 4.1 3.0 .7 10.3 ----- .6 .8 ----- 2.0 1.1 2.2 .0 .0 .0 .0 -193.4 .0 .0 -210.2 -4.6 -1.7 -1.5 -3.9 .0	----- -1.1 -5 -3 -1.4 -9 -3 -1.9 ----- -2.3 -9 ----- -5 -7 -7 -91.8 -48.6 -1 -105.5 -6.5 -2.8 -210.2 -4.6 -1.7 -1.5 -3.9 -7.3	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 503.8 .0 7.0 175.8 318.8 389.2 9.0 6.4	----- 425.7 177.9 167.5 690.0 439.2 114.0 849.0 ----- 828.4 310.6 ----- 259.1 152.6 442.9 2,566.0 825.8 118.9 540.5 13,268.0 2,614.2 443.3 1,656.7 2,385.1 722.4 562.7 5,025.1
39 40 to 47 481,7,9 483 49 50 to 59 60 to 64,67 65,66 70,72,76 73,81,84,89 75 78,79 80,82,86 Federal enterprises State & local enterprises		434.0 2,661.0 848.0 119.0 646.0 13,862.0 2,617.0 665.0 1,966.0 2,090.0 347.0 621.0 4,972.0 887.2 454.0	.1 .0 26.5 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	----- 262.0 152.3 434.1 2,661.0 874.5 119.0 646.0 13,862.0 2,617.0 665.0 1,966.0 2,090.0 347.0 621.0 4,972.0	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 13.5 .0 .0 -107.6 ^{4/} -15.3 ^{3/} .0 -0.5 ^{5/} 132.0 ^{5/}	----- 5.8 .0 1.8 4.1 3.0 .7 10.3 ----- .6 .8 ----- 2.0 1.1 2.2 .0 .0 .0 .0 -193.4 .0 .0 -210.2 -4.6 -1.7 -1.5 -3.9 .0	----- -1.1 -5 -3 -1.4 -9 -3 -1.9 ----- -2.3 -9 ----- -5 -7 -7 -91.8 -48.6 -1 -105.5 -6.5 -2.8 -210.2 -4.6 -1.7 -1.5 -3.9 -7.3	----- .0 .0 .0 .0 .0 .0 .0 ----- .0 .0 ----- .0 .0 .0 .0 .0 .0 503.8 .0 7.0 175.8 318.8 389.2 9.0 6.4	----- 425.7 177.9 167.5 690.0 439.2 114.0 849.0 ----- 828.4 310.6 ----- 259.1 152.6 442.9 2,566.0 825.8 118.9 540.5 13,268.0 2,614.2 443.3 1,656.7 2,385.1 722.4 562.7 5,025.1
78 79		887.2 454.0	.0 .0	887.2 454.0	.0 .0	.0 .0	-11.5 -126.9	.0 .0	875.7 327.1

*The entries in column (9) are the sum of the entries in columns (3) through (8).

Appendix Table 3
Reconciliation of National Income and Product (NIPA) and Input-Output (I-0) Employment by Industry, 1967
(Thousands of full- and part-time employees)
- continued -

Industry number SIC	I-0	NIPA (1)	NIPA- I-0 adjust- ments (2)	Adjusted NIPA, by I-0 industry (3)	I-0 - SIC classification changes (4)	Redefinitions				I-0 (9)*
						MSO (5)	Force account (6)	Out (7)	Other In (8)	
Rest of world	85	-5.0	.0	-5.0	.0	.0	.0	.0	.0	-5.0
88	86	2,527.0	.0	2,527.0	.0	.0	.0	.0	.0	2,527.0
Federal	97	6,610.0	.0	6,610.0	.0	.0	-55.2	.0	.0	6,554.8
State & local government	98	8,434.0	.0	8,434.0	.0	.0	-294.9	.0	.0	8,139.1
Total		75,331.2	.0	75,331.2	.0	.0	.0	-1,662.3	1,662.3	75,331.2

*The entries in column (9) are the sum of the entries in columns (3) through (8).

1/ Manufacturers' sales offices (redefined from trade to manufacturing).
2/, 3/, 4/, 5/ See footnotes at end of Appendix Table 4.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Appendix Table 4
Reconciliation of National Income and Product (NIPA) and Input-Output (I-O)
Employee Compensation by Industry, 1967
(In millions of dollars, for full- and part-time employees)

Industry number SIC	I-O	NIPA (1)	NIPA- I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classifi- cation changes (4)	Redefinitions				I-O (9)*
						MSO (5)	Force account (6)	Out (7)	In (8)	
1	1	3,629.0	.0	1,299.7	.0	---	---	---	---	---
7 to 9	2	1,065.0	.0	2,329.3	.0	.0	.0	.0	.0	1,299.7
10	3			---	---	---	---	---	---	2,329.3
	4			144.6	.0	.0	.0	.0	.0	---
	5	700.0	-58.4	920.4	-90.3	.0	.0	.0	106.7	144.6
	6			---	---	---	---	---	---	936.8
11,12	7			253.0	.0	.0	-24.9	.0	.0	---
13	8	1,278.0	-35.5	388.6	.0	.0	-36.4	.0	.0	228.1
14	9	2,379.0	-293.0	1,242.5	.0	.0	-27.8	.0	.0	352.2
	10	934.0	-21.1	2,086.0	-794.5	.0	-409.6	.0	.0	1,214.7
15 to 17	11	27,106.0	-342.7	---	---	---	---	---	---	881.9
	12			701.3	.0	.0	-14.9	.0	.0	---
	13			211.6	.0	.0	-12.5	.0	.0	686.4
19+37-371	14	13,962.0	-9,877.2 ^{2/}	---	---	---	---	---	---	199.1
20	15	12,698.0	-358.7	20,741.0	616.3	.0	4,016.8	-753.6	440.7	---
21	16	549.0	28.9	6,022.3	178.2	.0	5,646.0	.0	.0	25,061.2
22,23	17	11,785.0	-247.1	4,084.8	.0	.0	-5.4	.0	.0	11,846.5
	18			12,339.3	.0	284.7	-53.5	.0	562.3	4,079.4
	19			577.9	.0	4.3	-1.7	.0	61.2	13,132.8
24	20	3,440.0	-211.5	---	---	---	---	---	---	641.7
	21			3,233.6	.0	71.5	-11.1	.0	104.4	---
	22			748.8	.0	24.7	-2.5	.0	6.3	3,398.4
25	23	2,726.0	-138.4	6,660.8	.0	56.8	-5.6	.0	70.0	777.3
	24			894.7	.0	5.3	-1.0	.0	.0	6,782.0
	25			---	---	---	---	---	---	899.0
	26	5,415.0	21.7	3,075.8	.0	20.2	-21.9	.0	.0	---
				152.7	.0	.0	-.3	.0	.0	3,074.1
				---	---	---	---	---	---	152.4
				1,667.9	.0	3.5	-3.8	.0	.0	---
				919.7	.0	5.4	-2.8	.0	.0	1,667.7
				---	---	---	---	---	---	922.3
				3,835.1	.0	57.9	-30.2	.0	.0	---
				1,601.6	.0	30.0	-5.7	.0	.0	3,862.8
				---	---	---	---	---	---	1,625.9

*The entries in column (9) are the sum of the entries in columns (3) through (8).

Appendix Table 4
Reconciliation of National Income and Product (NIPA) and Input-Output (I-O)
Employee Compensation by Industry, 1967
(In millions of dollars, for full- and part-time employees)
- continued -

Industry number SIC	I-O	NIPA (1)	NIPA I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classification changes (4)	Redefinitions				I-O (9)*
						MSO (5)	Force account (6)	Other	In (8)	
							Out (7)			
27	26	8,076.0	59.1	8,135.1	.0	85.0	-17.7	.0	.0	8,202.3
28	27	9,238.0	-110.3	4,168.3	----	----	----	----	----	----
	28			2,036.5	.0	151.9	-35.2	-88.1	.0	4,197.0
	29			2,322.5	.0	45.6	-19.0	.0	.0	2,063.1
	30			600.4	.0	108.8	-11.2	.0	.0	2,420.1
29	31	2,128.0	496.3	2,624.3	.0	24.6	-2.6	.0	.0	622.4
30	32	3,929.0	38.1	3,967.1	.0	19.8	-52.7	.0	.0	2,591.4
31	33	1,806.0	-101.0	----	----	35.3	-11.4	.0	.0	3,990.9
	34			231.5	.0	----	----	----	----	----
	35			1,473.5	.0	1.6	-.5	.0	.0	232.6
32	36	4,817.0	-109.9	----	----	2.5	-1.3	.0	.0	1,474.7
	37			1,382.0	.0	----	----	----	----	----
33	38	12,209.0	70.3	3,325.0	.0	33.1	-5.7	.0	.0	1,409.5
	39			8,978.1	.0	60.1	-18.3	.0	.0	3,366.8
34	40	10,838.0	245.0	----	----	----	----	----	----	----
	41			3,301.2	.0	185.8	-43.9	.0	.0	9,120.0
	42			774.0	.0	70.5	-22.0	.0	88.1	3,437.8
	43			3,701.6	.0	----	----	----	----	----
	44			2,974.3	.0	.0	-1.8	.0	.0	772.2
	45			3,633.1	.0	18.4	-10.5	-241.0	.0	3,468.5
	46			984.2	.0	2.7	-7.5	.0	.0	2,969.5
35	47	17,296.0	-285.0	----	----	10.5	-8.5	.0	.0	3,635.1
	48			1,270.5	.0	----	----	----	----	----
	49			1,703.8	.0	22.8	-3.0	.0	.0	1,004.1
	50			779.4	.0	8.9	-3.0	.0	.0	1,276.3
	51			3,254.0	.0	2.6	-5.0	.0	.0	1,701.4
	52			1,847.6	.0	15.8	-1.5	-14.1	.0	779.6
				2,529.6	.0	25.6	-6.2	.0	.0	3,273.4
				1,615.2	.0	35.6	-4.4	.0	.0	1,878.8
				1,899.9	.0	21.9	-6.4	-14.5	.0	2,530.6
				1,126.9	.0	.0	-2.5	.0	10.8	1,623.5
					.0	138.3	-3.5	-83.1	.0	1,951.8
					.0	18.7	-3.2	-3.6	.0	1,138.8

*The entries in column (9) are the sum of the entries in columns (3) through (8).

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Appendix Table 4
Reconciliation of National Income and Product (NIPA) and Input-Output (I-O)
Employee Compensation by Industry, 1967
(In millions of dollars, for full- and part-time employees)
- continued -

Industry number SIC	I-O	NIPA (1)	NIPA I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classifi- cation changes (4)	Redefinitions				I-O (9)*
						MSO (5)	Force account (6)	Other	In (8)	
36		15,396.0	687.1							
	53			3,426.8						
	54			1,355.3						
	55			1,164.9						
	56			6,153.4						
371	57			3,104.6						
	58			878.2						
	59	8,448.0	-227.42/	8,220.6						
	60	.0	10,883.22/	8,501.0						
	61			2,382.1						
38		3,773.0	-392.2							
	62			1,976.4						
	63			1,404.4						
	64	2,695.0	-62.7	2,632.3						
	65	21,847.0	.0	21,847.0						
39	66	6,966.0	342.7	7,308.7						
	67	1,061.0	.0	1,061.0						
	68	5,908.0	.0	5,908.0						
	69	75,216.0	.0	75,216.0						
	70	19,399.0	.0	19,399.0						
40 to 47	71	3,400.0	.0	3,400.0						
	72	8,557.0	.0	8,557.0						
	73	14,390.0	.0	14,390.0						
	74	1,821.0	.0	1,821.0						
	75	3,318.0	.0	3,318.0						
481,7,9	76	22,709.0	.0	22,709.0						
	77									
	78	5,881.0	.0	5,881.0						
	79	3,227.0	.0	3,227.0						
483										
49										
50 to 59										
60 to 64,67										
65,66										
70,72,76										
73,81,84,89										
75										
78,79										
80,82,86										
Federal enterprises State & local enterprises										

*The entries in column (9) are the sum of the entries in columns (3) through (8).

Appendix Table 4
Reconciliation of National Income and Product (NIPA) and Input-Output (I-O)
Employee Compensation by Industry, 1967
(In millions of dollars, for full- and part-time employees)
- continued -

Industry number SIC	I-O	NIPA (1)	NIPA I-O adjust- ments (2)	Adjusted NIPA, by I-O industry (3)	I-O - SIC classification changes (4)	Redefinitions				I-O (9)*
						MSO (5)	Force account (6)	Other Out (7)	In (8)	
Rest of world	85									
88	86	57.0	.0	57.0	.0	.0	.0	.0	.0	57.0
Federal		4,701.0	.0	4,701.0	.0	.0	.0	.0	.0	4,701.0
Government	97	35,612.0	.0	35,612.0	.0	.0	-463.7	.0	.0	35,148.3
State & Local										
government	98	49,530.0	.0	49,530.0	.0	.0	-2,694.5	.0	.0	46,835.5
Total		471,915.0	.0	471,915.0	.0	.0	.0	-8,970.9	8,970.9	471,915.0

*The entries in column (9) are the sum of the entries in columns (3) through (8).

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

1/ Manufacturers' sales offices.

2/ NIPA combines SIC's 19 + (37-371); all the NIPA - I-0 adjustments were assumed to come out of (37-371).

<u>Employees</u> <u>(Thousands)</u>	<u>Compensation</u> <u>(Million \$)</u>	
-1,053.0	-9,877.2	Transferred to SIC 37-371
<u>1,131.0</u>	<u>10,883.2</u>	Census 37-371
78.0	1,006.0	NIPA - I-0 adjustment

3/ Represents sum of the following reclassifications.

	<u>Employees</u> <u>(Thousands)</u>	<u>Compensation</u> <u>(Million \$)</u>	
(A)	-13.5	-59.5	Trading stamps from I-0 73 to I-0 69
(B)	-15.8	-85.4	SIC 84 moved to I-0 77
(C)	-93.6	-752.0	SIC 8921 moved to I-0 77
(D)	<u>107.6</u>	<u>712.5</u>	SIC 7692, 7694, 7699 moved from I-0 72 to I-0 73
Total	-15.3	-184.5	

Row B was estimated using the County Business Pattern ratio of SIC 84 to the sum of SIC's 84 and 89, multiplied against the NIPA combined total of SIC's 84 and 89. Rows C and D were estimated similarly.

4/ From row D of footnote 3.

5/ Contains the estimates shown in rows B and C of footnote 3, plus the reclassification of veterinarians from I-0 4 to I-0 77. For veterinarians there were: 22,700 employees and \$90.3 million in employee compensation.

Appendix Table 5
Employment, Compensation, and Related Measures, by 367-Industry I-O Detail, 1967

Industry number	All employees				Production workers			Value added	Comp. to VA ratio
	Employment (000)	Compensation (mil.\$)	Wages and salaries (mil.\$)	Supplements (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)		
1.01	203.7	626.1	588.6	37.4				2,635.8	.24
1.02	48.1	107.8	101.3	6.4				423.6	.25
1.03	197.1	565.9	532.0	33.8				5,093.7	.11
2.01	57.3	93.2	87.6	5.6				407.5	.23
2.02	196.8	560.5	527.0	33.5				6,767.8	.08
2.03	76.7	140.6	132.2	8.4				869.5	.16
2.04	214.7	699.7	657.9	41.8				1,172.3	.60
2.05	247.7	724.5	681.2	43.3				2,146.6	.34
2.06	29.1	71.1	66.9	4.3				1,761.4	.04
2.07	14.7	39.7	37.3	2.4				885.6	.04
3.00	23.5	144.6	133.6	11.0				819.8	.18
4.00	242.5	936.8	865.5	71.3				1,559.2	.60
5.00	24.1	228.1	199.7	28.3	21.1	42.4	156.4	506.8	.45
6.01	19.5	183.0	160.3	22.7	15.0	32.5	114.6	347.0	.53
6.02	21.4	169.2	148.2	21.0	19.3	39.0	125.1	268.2	.63
7.00	130.3	1,214.7	961.8	252.8	115.2	224.0	811.8	1,856.5	.65
8.00	95.4	881.9	797.7	84.1				8,607.9	.10
9.00	95.4	686.4	621.0	65.4	78.9	173.1	475.4	1,322.3	.52
10.00	22.6	199.1	180.1	19.0	15.9	34.5	113.5	598.9	.33
11.01	935.4	7,172.5	6,581.7	590.8				10,366.7	.69
11.02	952.0	8,620.4	7,907.7	712.7				10,276.6	.84
11.03	383.4	3,555.7	3,184.6	371.2				4,003.4	.89
11.04	312.2	2,840.6	2,593.0	247.6				3,905.3	.73
11.05	343.5	2,872.0	2,618.0	254.0				3,942.5	.73
12.01	357.6	2,407.7	2,210.0	197.7				3,224.9	.75
12.02	1,159.9	9,438.8	8,507.1	931.6				10,531.3	.90
13.01	204.4	2,444.7	2,148.4	296.4	70.2	142.9	587.0	2,771.6	.88
13.02	103.3	806.3	721.6	84.6				1,041.5	.77
13.03	13.4	118.2	103.8	14.4	10.0	20.7	68.1	125.4	.94
13.04	4.7	45.6	41.4	4.2	2.4	5.2	18.1	44.5	1.02
13.05	17.7	143.7	127.2	16.5	13.1	27.4	83.3	217.7	.66
13.06	25.5	201.2	177.0	24.2	19.7	39.0	123.7	260.2	.77
13.07	37.4	319.7	290.3	29.4	22.6	46.5	147.9	412.8	.77
14.01	338.8	2,469.3	2,214.7	254.6	262.7	536.9	1,529.9	2,879.2	.86
14.02	9.4	55.6	50.9	4.7	6.4	13.9	31.3	57.2	.97
14.03	22.3	133.9	121.6	12.3	16.6	33.9	80.0	156.2	.86
14.04	14.0	103.1	91.6	11.5	10.0	20.7	59.3	342.7	.30
14.05	26.6	195.1	174.8	20.3	13.8	27.2	77.2	312.9	.62
14.06	176.2	1,299.9	1,165.3	134.6	60.5	126.4	356.7	1,800.1	.72
14.07	16.5	84.5	75.2	9.3	14.0	23.6	54.8	130.9	.65
14.08	28.8	198.2	174.6	23.6	22.4	45.0	115.1	437.2	.45
14.09	110.6	636.4	561.0	75.4	88.9	174.0	376.0	974.0	.65
14.10	11.6	71.1	63.1	8.0	9.4	18.1	44.0	120.0	.59
14.11	23.9	149.4	134.2	15.2	16.2	31.7	72.0	170.8	.87
14.12	22.0	90.0	81.3	8.7	19.4	32.8	60.0	116.4	.77
14.13	67.8	364.1	323.2	40.9	56.4	110.7	230.4	583.7	.62
14.14	50.1	436.9	384.8	52.1	30.4	64.7	202.8	1,055.7	.41
14.15	70.4	498.9	453.2	45.7	39.8	86.6	215.3	555.3	.90
14.16	4.7	32.5	28.8	3.7	3.2	7.2	15.0	71.3	.46
14.17	16.8	167.2	146.3	20.9	9.8	20.3	75.2	289.6	.58
14.18	321.0	2,317.6	2,070.9	246.7	185.4	372.2	1,038.3	3,516.0	.66
14.19	36.5	292.5	258.3	34.2	24.9	53.5	140.9	610.2	.48
14.20	86.4	518.0	462.4	55.6	68.6	132.4	312.1	976.1	.53
14.21	98.1	952.5	836.4	116.1	61.4	120.4	473.2	4,992.2	.19
14.22	129.8	872.3	791.9	80.3	46.6	95.3	219.3	1,249.0	.70
14.23	10.4	90.2	81.5	8.7	5.5	11.0	33.0	517.5	.17
14.24	5.8	32.5	29.0	3.6	4.2	9.4	17.1	36.2	.90
14.25	8.8	69.6	61.7	7.9	5.5	12.2	34.4	161.3	.43
14.26	1.8	13.4	12.0	1.4	1.4	3.1	7.9	32.3	.41
14.27	14.5	109.1	98.6	10.4	9.5	21.7	58.2	189.5	.58
14.28	19.4	169.1	149.9	19.3	9.4	19.0	62.1	558.6	.30
14.29	17.1	149.4	132.5	16.9	10.5	22.7	74.0	247.8	.60
14.30	8.4	45.8	41.8	4.0	5.4	10.4	23.2	53.6	.85
14.31	8.0	53.6	48.4	5.2	5.4	11.0	25.4	92.2	.58
14.32	68.7	461.2	416.4	44.8	42.9	83.7	198.3	753.6	.61
15.01	66.5	482.8	381.4	101.4	52.7	99.3	257.9	3,522.7	.14
15.02	28.7	158.9	129.6	29.4	22.0	42.6	74.3	341.3	.47
16.01	459.7	2,601.7	2,376.4	225.3	391.3	828.7	1,787.7	3,645.5	.71
16.02	26.7	137.5	124.8	12.7	23.3	46.7	96.3	210.0	.65
16.03	123.7	601.0	546.6	54.4	110.5	224.0	440.4	836.9	.72
16.04	11.8	58.2	52.6	5.6	10.0	19.2	38.7	95.3	.61
17.01	47.3	290.4	262.5	27.9	36.0	77.0	165.4	497.9	.58
17.02	4.6	30.7	27.8	2.9	3.6	7.7	19.1	55.8	.55
17.03	5.1	27.0	24.7	2.3	4.4	8.4	19.5	30.9	.87
17.04	6.7	42.5	37.7	4.8	5.3	10.7	26.1	59.0	.72

Appendix Table 5
Employment, Compensation, and Related Measures, by 367-Industry I-O Detail, 1967
- continued -

Indus- try number	All employees				Production workers			Value added	Comp. to VA ratio
	Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)		
17.05	4.6	23.5	21.5	2.0	3.9	8.0	15.4	20.0	1.17
17.06	18.0	142.4	128.1	14.4	12.7	26.9	78.1	225.6	.63
17.07	10.4	58.5	51.5	7.0	9.2	18.4	41.7	64.7	.90
17.08	6.2	36.1	32.5	3.6	5.3	10.8	25.0	93.7	.39
17.09	10.5	56.8	51.0	5.8	8.7	17.2	36.3	81.3	.70
17.10	10.4	69.2	63.4	5.9	7.6	15.3	33.8	101.8	.68
18.01	98.8	415.7	379.9	35.8	88.2	163.7	304.1	539.3	.77
18.02	109.8	537.9	489.3	48.7	94.1	176.7	359.5	683.9	.79
18.03	36.9	222.1	202.5	19.6	30.7	65.5	145.6	328.5	.68
18.04	1,232.1	5,606.2	5,113.9	492.3	1,064.0	1,918.6	3,793.7	6,811.4	.82
19.01	26.3	113.1	104.7	8.5	22.7	42.6	78.1	145.8	.78
19.02	47.5	223.6	206.4	17.2	39.3	76.4	144.5	270.3	.83
19.03	102.2	562.2	502.5	59.7	87.7	165.0	371.8	835.5	.67
20.01	71.4	379.9	345.6	34.2	67.5	125.9	306.8	1,183.3	.32
20.02	185.0	1,025.6	924.9	100.7	164.7	322.7	754.8	1,399.5	.73
20.03	28.6	131.3	119.7	11.6	25.2	51.5	94.4	152.2	.86
20.04	7.4	33.1	30.4	2.7	6.7	10.9	25.4	56.8	.58
20.05	66.5	425.1	388.4	36.7	53.9	106.6	274.1	573.9	.74
20.06	76.0	504.4	450.4	54.0	66.7	138.4	361.9	612.1	.82
20.07	17.1	122.8	111.6	11.2	11.9	23.8	61.2	155.0	.79
20.08	12.5	70.7	63.8	6.9	10.3	21.7	47.1	123.0	.58
20.09	71.5	381.3	347.3	34.0	61.0	119.9	255.4	589.7	.65
21.00	31.8	152.4	138.0	14.4	28.3	55.6	109.5	219.6	.69
22.01	164.0	864.5	784.2	80.3	142.3	289.1	503.7	1,178.2	.73
22.02	76.8	428.5	390.8	37.7	64.8	125.9	287.0	556.6	.77
22.03	31.7	177.8	161.8	16.0	25.8	50.3	109.6	247.5	.72
22.04	32.0	196.8	179.8	17.1	24.4	47.8	110.7	287.2	.69
23.01	8.4	53.3	48.3	5.0	6.9	14.3	35.6	74.0	.72
23.02	27.9	211.2	187.2	24.0	21.1	42.9	125.3	328.3	.64
23.03	23.2	153.3	137.2	16.0	17.5	36.3	89.2	209.4	.73
23.04	25.7	191.0	174.3	16.7	20.7	40.9	124.1	237.4	.80
23.05	23.2	175.5	158.1	17.5	17.0	35.1	96.0	242.7	.72
23.06	11.9	71.7	64.1	7.7	8.6	15.9	37.7	100.2	.72
23.07	10.3	66.3	60.9	5.4	8.4	17.2	44.8	85.7	.77
24.01	15.4	145.4	130.7	14.7	12.2	25.4	96.0	250.7	.58
24.02	151.9	1,421.3	1,264.2	157.0	112.3	249.2	809.2	2,055.6	.69
24.03	72.3	671.3	597.7	73.6	53.8	118.2	405.9	1,314.2	.51
24.04	24.6	181.8	163.1	18.7	18.1	37.6	98.0	209.6	.87
24.05	23.9	197.4	176.7	20.7	18.3	37.6	119.2	477.6	.41
24.06	15.3	124.0	110.1	13.9	11.8	25.1	77.3	182.8	.68
24.07	152.7	1,121.6	1,011.4	110.2	108.6	220.0	592.1	1,723.8	.65
25.00	225.8	1,625.9	1,461.5	164.3	172.6	358.2	967.9	2,227.1	.73
26.01	342.5	2,516.1	2,295.0	221.1	169.2	302.0	1,121.5	3,215.5	.78
26.02	85.5	761.1	692.9	68.2	14.5	25.2	80.5	1,153.1	.66
26.03	104.9	832.6	755.8	76.8	49.9	98.1	304.5	1,184.3	.70
26.04	34.4	238.0	218.2	19.8	15.0	25.6	79.7	385.6	.62
26.05	327.3	2,555.8	2,358.7	197.1	254.5	496.5	1,646.6	3,210.3	.80
26.06	62.7	462.4	419.3	43.1	44.7	89.8	253.4	743.2	.62
26.07	29.2	185.0	164.5	20.5	16.4	31.3	75.0	297.2	.62
26.08	83.3	651.2	605.4	45.8	67.4	127.6	450.1	818.0	.80
27.01	297.4	2,971.2	2,618.9	352.3	154.7	314.0	1,173.3	6,294.5	.47
27.02	36.6	249.6	223.2	26.4	24.1	50.0	123.6	518.2	.48
27.03	12.9	106.4	95.2	11.3	6.9	13.6	39.0	298.2	.36
27.04	105.3	869.7	778.2	91.5	64.4	130.1	390.2	1,299.4	.67
28.01	89.9	906.2	800.9	105.2	46.8	95.6	332.7	1,167.5	.78
28.02	15.6	174.3	151.4	22.9	8.5	16.8	66.5	328.3	.53
28.03	40.0	317.9	275.2	42.8	25.3	50.0	141.1	404.0	.79
28.04	71.5	664.7	575.5	89.2	40.7	80.9	257.9	1,038.7	.64
29.01	148.9	1,418.9	1,258.4	160.5	65.6	128.2	405.1	2,797.4	.51
29.02	70.7	657.4	582.4	75.0	34.9	69.0	222.4	1,436.4	.46
29.03	45.5	343.9	307.1	36.8	26.4	50.2	125.0	607.4	.57
30.00	72.8	622.4	557.7	64.7	36.3	73.1	223.4	945.6	.66
31.01	170.4	2,190.7	1,659.4	531.3	80.4	161.2	661.8	6,401.3	.34
31.02	17.6	193.0	149.0	43.9	8.5	18.0	58.4	234.3	.82
31.03	20.4	207.7	160.8	47.0	10.4	22.9	66.2	228.0	.91
32.01	108.3	1,083.1	925.9	157.2	71.4	136.5	573.8	1,922.5	.56
32.02	29.6	168.2	145.0	23.2	25.7	46.5	112.8	202.3	.83
32.03	145.8	1,102.1	960.7	141.4	109.0	217.6	627.2	1,474.0	.75
32.04	255.2	1,637.5	1,469.3	168.2	204.0	414.9	998.7	2,592.6	.63
33.00	34.0	232.6	208.2	24.4	28.4	56.8	152.9	323.4	.72
34.01	13.9	66.5	61.1	5.4	12.2	22.7	45.8	94.0	.71
34.02	221.3	1,062.4	962.3	100.1	191.0	354.2	720.8	1,348.4	.79
34.03	71.5	345.7	314.6	31.1	61.7	115.5	227.5	394.4	.88
35.01	105.5	843.0	745.6	97.5	80.2	159.8	503.9	1,330.0	.63
35.02	74.9	566.4	506.8	59.6	59.4	119.4	362.3	782.8	.72

Appendix Table 5
Employment, Compensation, and Related Measures, by 367-Industry I-O Detail, 1967
- continued -

Industry number	All employees				Production workers			Value added	Comp. to VA ratio
	Employment (000)	Compensation (mil.\$)	Wages and salaries (mil.\$)	Supplements (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)		
36.01	37.3	348.5	300.5	48.0	26.2	52.5	184.4	652.1	.53
36.02	28.3	165.5	150.3	15.2	23.3	47.9	109.8	213.9	.77
36.03	11.1	72.8	65.6	7.3	8.5	17.6	41.8	81.6	.89
36.04	13.1	101.6	89.6	12.0	10.1	19.2	59.2	117.6	.86
36.05	10.1	66.1	58.5	7.6	8.1	16.5	42.9	87.1	.76
36.06	8.5	64.6	57.6	7.0	7.0	13.8	45.7	109.7	.59
36.07	13.1	72.4	65.1	7.3	11.3	21.0	49.9	81.1	.89
36.08	13.6	104.5	91.8	12.7	11.0	22.2	67.5	148.9	.70
36.09	8.2	44.2	40.0	4.2	6.7	13.1	27.0	53.7	.82
36.10	21.7	147.5	135.3	12.3	14.6	30.6	77.0	230.2	.64
36.11	59.4	413.4	374.2	39.2	45.4	94.2	247.9	623.1	.66
36.12	77.4	593.7	538.9	54.8	49.2	100.7	308.6	880.1	.67
36.13	7.3	52.9	47.0	5.8	5.7	12.0	33.4	95.9	.55
36.14	11.4	94.3	85.8	8.5	7.8	17.5	52.2	198.0	.48
36.15	17.2	104.9	96.2	8.7	14.1	28.3	70.9	132.1	.79
36.16	29.2	251.0	220.1	30.9	18.9	36.3	119.2	347.2	.72
36.17	23.8	193.3	170.5	22.8	16.8	35.0	107.5	284.5	.68
36.18	19.6	139.6	125.7	14.0	14.1	27.8	76.8	176.2	.79
36.19	9.3	72.5	64.3	8.2	7.0	14.4	41.7	110.5	.66
36.20	16.7	137.0	124.0	13.1	12.2	25.5	83.9	227.7	.60
36.21	10.6	90.4	79.7	10.7	7.4	14.8	49.5	141.4	.64
36.22	5.5	36.1	32.7	3.5	4.3	8.3	21.1	47.1	.77
37.01	658.0	6,473.2	5,495.0	978.2	500.8	981.6	3,829.2	9,169.7	.71
37.02	241.1	1,999.3	1,732.5	266.8	198.3	402.1	1,306.7	2,396.7	.83
37.03	42.8	419.0	365.8	53.2	33.4	67.2	265.6	548.2	.76
37.04	27.2	228.5	204.8	23.7	19.7	41.4	124.5	308.7	.74
38.01	12.2	102.9	87.5	15.4	9.2	18.1	61.0	152.5	.67
38.02	2.8	23.5	20.5	3.0	2.1	4.3	13.3	34.5	.68
38.03	8.6	73.3	63.5	9.8	6.4	13.5	42.9	92.7	.79
38.04	33.7	320.6	280.5	40.1	26.5	53.0	200.2	864.8	.37
38.05	7.6	71.0	62.4	8.6	5.2	11.2	38.1	112.4	.63
38.06	17.8	147.0	130.1	16.8	12.8	26.6	78.4	215.1	.68
38.07	42.9	374.6	322.9	51.7	32.2	64.5	219.0	645.2	.58
38.08	68.0	634.0	552.2	81.9	48.7	101.0	354.9	869.5	.73
38.09	23.5	215.7	188.0	27.7	14.8	30.9	100.4	361.3	.60
38.10	75.8	617.8	546.5	71.3	55.3	117.0	352.7	1,394.1	.44
38.11	47.9	385.4	341.6	43.7	38.8	78.8	243.6	457.7	.84
38.12	19.5	150.3	135.2	15.1	15.1	30.6	89.2	194.6	.77
38.13	28.0	214.4	190.6	23.8	22.1	45.0	131.2	282.7	.76
38.14	10.7	107.3	95.4	11.9	7.4	16.5	61.4	108.2	.99
39.01	69.9	673.7	577.8	95.9	52.3	112.7	393.3	1,045.2	.64
39.02	11.9	98.5	87.1	11.4	9.1	19.4	59.9	127.8	.77
40.01	11.1	91.7	82.1	9.6	8.1	16.4	53.5	114.5	.80
40.02	16.1	122.0	109.0	13.0	11.4	22.8	64.2	145.5	.84
40.03	43.5	330.5	294.5	36.1	29.0	57.5	160.7	418.4	.79
40.04	105.5	863.6	766.8	96.8	80.1	163.6	509.9	1,094.6	.79
40.05	64.8	431.3	388.4	42.9	47.9	94.8	235.7	499.9	.86
40.06	89.3	736.1	652.8	83.3	73.1	150.4	477.5	1,068.2	.69
40.07	63.3	510.0	456.4	53.5	52.9	105.8	336.0	712.9	.72
40.08	19.1	135.4	122.7	12.8	15.4	29.5	81.5	188.0	.72
40.09	32.1	247.9	218.9	29.1	23.2	47.4	137.4	383.8	.65
41.01	118.7	978.7	877.0	101.7	93.7	196.7	605.7	1,457.5	.67
41.02	229.7	1,990.8	1,733.0	257.7	187.0	379.8	1,272.4	2,813.9	.71
42.01	13.5	97.4	85.2	12.2	10.4	20.5	54.5	208.0	.47
42.02	43.8	327.1	292.2	34.9	33.5	68.0	195.3	534.7	.61
42.03	104.7	824.4	726.8	97.6	80.0	171.4	492.4	1,281.5	.64
42.04	82.2	535.7	489.7	46.0	69.0	137.4	356.0	773.0	.69
42.05	61.6	419.4	376.5	42.9	49.3	99.0	257.2	574.8	.73
42.06	3.9	31.3	27.7	3.6	2.6	4.9	16.4	49.7	.63
42.07	7.9	63.8	56.2	7.6	6.2	12.6	39.8	80.6	.79
42.08	116.9	949.8	849.1	100.6	81.2	166.4	516.4	1,435.1	.66
42.09	4.4	27.4	24.6	2.9	3.9	7.6	18.7	32.1	.85
42.10	6.8	56.7	51.1	5.7	4.8	10.3	31.1	99.6	.57
42.11	42.5	302.0	271.8	30.3	32.8	66.0	176.1	458.9	.66
43.01	39.1	390.8	350.4	40.5	24.6	49.9	195.6	494.3	.79
43.02	66.5	613.2	531.7	81.5	47.5	97.2	344.6	890.4	.69
44.00	152.0	1,276.3	1,106.3	170.1	104.0	203.2	662.3	1,716.3	.74
45.01	139.9	1,221.7	1,061.7	160.0	98.6	193.9	673.4	1,859.7	.66
45.02	22.8	188.7	168.3	20.4	14.9	29.7	95.8	264.2	.71
45.03	34.3	290.9	257.2	33.7	21.7	46.1	143.4	436.3	.67
46.01	13.7	121.4	107.6	13.8	8.8	18.1	63.4	143.9	.84
46.02	29.1	258.8	231.9	26.9	16.8	35.0	112.0	332.6	.78
46.03	17.6	160.5	143.9	16.7	11.6	24.1	88.0	192.1	.84
46.04	28.4	238.9	214.2	24.8	17.7	36.5	115.6	335.2	.71
47.01	89.9	883.2	790.8	92.4	60.5	131.8	476.5	1,216.4	.73

Appendix Table 5
Employment, Compensation, and Related Measures, by 367-Industry I-O Detail, 1967
- continued -

Industry number	All employees				Production workers			Value added	Comp. to VA ratio
	Employment (000)	Compensation (mil.\$)	Wages and salaries (mil.\$)	Supplements (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)		
47.02	30.3	292.6	261.6	31.0	20.9	46.2	165.0	364.8	.80
47.03	176.5	1,698.9	1,546.2	152.8	140.7	310.6	1,124.2	2,266.9	.75
47.04	48.5	398.6	356.0	42.6	34.0	69.4	218.8	589.1	.68
48.01	33.7	289.3	261.4	27.9	22.0	45.2	147.2	437.7	.66
48.02	41.3	298.5	267.6	30.9	29.4	62.5	169.1	323.2	.92
48.03	13.7	104.3	93.6	10.8	8.8	17.6	50.4	153.3	.68
48.04	22.4	205.6	185.1	20.5	14.6	31.1	111.6	213.9	.96
48.05	31.0	289.1	259.0	30.1	20.1	42.2	149.2	387.9	.75
48.06	75.8	692.0	619.8	72.2	46.1	97.8	323.0	889.0	.78
49.01	79.9	689.9	613.2	76.8	49.8	104.6	335.3	1,029.2	.67
49.02	61.6	560.0	487.7	72.3	47.5	100.9	343.5	725.7	.77
49.03	21.8	176.3	158.0	18.3	14.9	31.5	93.2	250.7	.70
49.04	11.0	119.0	108.3	10.7	9.5	19.4	86.7	143.0	.83
49.05	56.9	489.5	432.3	57.1	40.6	83.4	273.6	715.8	.68
49.06	16.6	148.3	135.1	13.2	8.9	18.3	58.2	200.2	.74
49.07	41.0	347.6	312.7	34.9	25.4	52.3	163.2	431.9	.80
50.00	206.3	1,623.5	1,479.2	144.3	169.9	348.5	1,100.1	2,222.6	.73
51.01	154.4	1,451.8	1,312.6	139.1	82.0	162.8	534.3	1,784.8	.81
51.02	30.2	237.9	215.8	22.1	19.9	39.3	116.6	399.5	.60
51.03	7.1	59.4	52.7	6.7	4.3	8.5	24.0	79.6	.75
51.04	23.9	202.7	182.2	20.5	13.5	26.6	82.1	290.7	.70
52.01	10.4	70.5	62.4	8.1	7.8	14.8	39.6	97.7	.72
52.02	7.7	58.7	53.3	5.3	5.4	11.2	32.5	76.6	.77
52.03	99.3	776.6	686.8	89.8	69.6	141.0	423.9	1,209.0	.64
52.04	6.7	54.3	48.5	5.8	4.3	8.9	25.1	75.5	.72
52.05	22.0	178.7	162.0	16.7	13.5	27.2	82.4	244.1	.73
53.01	72.4	608.8	540.6	68.2	40.4	78.7	222.3	669.6	.91
53.02	55.1	466.3	419.5	46.7	34.0	68.5	210.1	593.5	.79
53.03	81.5	703.4	629.2	74.2	49.7	100.5	304.9	885.6	.79
53.04	118.5	921.9	821.0	100.9	85.3	172.3	514.4	1,237.5	.74
53.05	53.4	427.2	381.3	46.0	34.8	69.6	210.7	621.5	.69
53.06	14.1	136.8	123.2	13.5	9.4	19.8	72.9	223.0	.61
53.07	12.2	98.3	86.2	12.1	9.1	18.5	57.8	160.3	.61
53.08	18.4	120.9	107.8	13.1	14.0	27.4	69.2	160.5	.75
54.01	21.4	155.9	138.5	17.3	16.0	31.3	88.7	185.7	.84
54.02	55.9	474.2	411.8	62.4	43.9	84.5	290.2	649.2	.73
54.03	23.4	189.8	167.8	22.0	17.8	33.7	113.8	321.8	.59
54.04	46.9	291.3	261.3	30.0	35.5	69.1	161.0	397.2	.73
54.05	9.7	70.8	64.0	6.8	7.1	13.2	39.6	154.7	.46
54.06	6.7	59.2	53.4	5.8	4.9	9.7	34.7	71.1	.83
54.07	14.0	110.4	98.1	12.3	10.0	20.6	60.1	166.9	.66
55.01	32.3	224.9	196.2	28.7	25.8	49.9	136.0	488.3	.46
55.02	67.5	465.9	416.7	49.3	50.0	98.8	252.6	685.4	.68
55.03	67.7	491.9	439.1	52.8	47.3	93.6	253.3	754.5	.65
56.01	136.0	976.7	859.8	116.8	96.2	183.4	462.6	1,217.3	.80
56.02	15.7	114.2	100.9	13.3	11.0	22.2	54.0	110.3	1.04
56.03	118.6	979.6	867.4	112.2	83.2	158.8	534.4	1,498.4	.65
56.04	419.6	4,116.3	3,709.8	406.5	221.3	447.6	1,515.6	5,001.2	.82
57.01	73.3	574.2	508.2	66.0	50.5	98.5	277.3	790.4	.73
57.02	93.2	702.5	629.8	72.7	57.9	118.1	307.3	679.5	1.03
57.03	272.7	1,854.4	1,663.5	190.9	185.0	359.6	864.3	2,183.9	.85
58.01	20.8	167.2	146.4	20.8	15.2	30.6	97.7	225.9	.74
58.02	11.7	74.4	65.7	8.7	8.9	17.6	43.2	162.0	.46
58.03	8.3	74.2	67.7	6.5	4.3	8.7	26.3	111.3	.67
58.04	58.7	482.0	416.9	65.1	44.2	86.3	286.8	701.0	.69
58.05	14.6	86.0	77.7	8.4	11.1	20.2	45.2	108.1	.80
59.01	33.1	237.3	217.8	19.5	24.6	49.4	138.5	250.0	.95
59.02	24.6	181.6	163.0	18.6	18.3	35.5	105.1	225.6	.80
59.03	791.3	8,045.0	6,768.4	1,276.6	572.5	1,154.0	4,418.9	12,984.7	.62
60.01	397.8	4,173.7	3,714.4	459.3	230.6	489.9	1,806.7	4,544.2	.92
60.02	202.6	2,115.6	1,871.9	243.7	112.6	245.8	875.2	2,447.4	.86
60.03	9.4	85.6	74.5	11.1	6.0	11.9	42.3	24.7	3.47
60.04	218.6	2,114.9	1,885.0	229.9	140.1	300.0	1,068.7	2,478.9	.85
61.01	140.3	1,219.8	1,095.7	124.1	114.2	231.0	819.4	1,213.9	1.00
61.02	30.9	183.4	166.6	16.7	26.2	51.8	128.1	229.0	.80
61.03	17.4	172.8	149.7	23.1	11.7	23.5	90.8	297.1	.58
61.04	54.0	467.8	406.0	61.8	40.0	76.8	272.9	495.5	.94
61.05	12.2	81.0	72.8	8.2	10.1	19.1	53.4	114.2	.71
61.06	44.4	275.4	245.3	30.1	37.4	73.1	180.3	374.9	.73
61.07	11.4	69.0	62.3	6.7	9.4	18.4	43.8	88.6	.78
62.01	46.9	372.2	337.9	34.3	31.4	64.0	191.2	491.8	.76
62.02	72.5	579.3	526.1	53.2	45.9	89.9	268.9	748.5	.77
62.03	33.1	253.7	228.3	25.4	22.6	45.2	131.1	342.7	.74
62.04	23.2	166.4	150.2	16.2	16.4	32.8	83.5	245.3	.68
62.05	36.6	257.8	232.9	24.9	24.6	48.0	125.7	415.6	.62

Appendix Table 5
Employment, Compensation, and Related Measures, by 367-Industry I-0 Detail, 1967
- continued -

Industry number	All employees				Production workers			Value added	Comp. to VA ratio
	Employment (000)	Compensation (mil.\$)	Wages and salaries (mil.\$)	Supplements (mil.\$)	Number (000)	Hours (mil.)	Wages (mil.\$)		
62.06	10.6	78.4	70.8	7.6	7.3	14.3	38.3	114.5	.69
62.07	36.2	245.3	219.0	26.3	27.6	55.2	139.5	299.1	.82
63.01	21.5	188.8	171.7	17.1	13.2	27.6	86.1	222.2	.85
63.02	26.9	170.8	154.1	16.6	20.7	41.1	103.4	229.6	.74
63.03	104.1	1,052.2	925.9	126.3	56.2	112.1	401.3	2,268.5	.46
64.01	87.9	565.4	517.6	47.8	71.1	136.7	337.3	837.3	.68
64.02	25.8	168.9	152.9	16.0	20.8	39.9	106.0	169.9	.99
64.03	72.8	387.3	348.3	39.0	59.9	111.4	226.3	532.7	.73
64.04	46.6	265.8	240.8	25.0	37.2	72.0	160.0	414.5	.64
64.05	36.0	233.5	212.5	21.0	25.4	50.2	116.3	334.2	.70
64.06	5.3	22.7	20.7	2.0	4.6	7.9	14.8	35.7	.63
64.07	24.9	148.4	132.8	15.7	20.0	39.8	87.3	227.7	.65
64.08	17.7	102.2	92.1	10.1	14.1	26.8	61.3	152.9	.67
64.09	6.3	52.6	47.3	5.3	4.9	10.1	33.2	111.4	.47
64.10	16.6	105.8	96.0	9.8	13.0	26.4	60.6	119.0	.89
64.11	48.6	347.0	317.4	29.6	36.8	70.6	198.8	439.4	.79
64.12	54.5	311.9	284.4	27.5	43.1	81.7	184.6	409.4	.76
65.01	611.2	5,564.0	4,895.8	668.2				8,537.9	.65
65.02	282.7	1,720.8	1,567.0	153.8				2,763.3	.62
65.03	1,028.6	7,883.3	7,152.8	730.5				11,183.6	.70
65.04	240.1	2,054.4	1,866.3	188.1				2,568.0	.80
65.05	297.4	2,924.8	2,632.3	292.5				4,653.4	.63
65.06	11.8	118.1	106.6	11.5				813.6	.15
65.07	94.2	695.5	616.5	79.0				849.8	.82
66.00	825.8	6,820.3	5,652.7	1,167.6				16,022.1	.43
67.00	118.9	1,060.2	971.3	88.9				1,582.2	.67
68.01	289.5	2,717.4	2,364.7	352.8				11,141.0	.24
68.02	220.3	1,837.4	1,598.8	238.5				5,292.5	.35
68.03	30.7	345.6	300.7	44.9				853.7	.40
69.01	3,130.8	26,970.8	24,088.1	1,982.7				43,798.8	.60
69.02	10,137.2	44,215.3	40,866.9	3,348.5				75,406.1	.59
70.01	869.2	5,920.4	5,088.2	832.2				11,744.2	.50
70.02	378.9	2,596.4	2,293.3	303.1				-872.1	--
70.03	156.0	1,999.7	1,851.7	148.0				3,638.1	.55
70.04	959.2	7,128.4	6,317.0	811.4				8,480.5	.84
70.05	250.9	1,734.4	1,582.5	151.9				3,474.0	.50
71.01	.0	.0	.0	.0				43,270.6	.00
71.02	443.3	1,715.2	1,571.2	144.0				39,763.5	.04
72.01	430.7	1,461.5	1,343.5	118.0				2,728.1	.54
72.02	901.3	4,107.8	3,832.9	274.9				6,889.2	.60
72.03	324.6	1,357.6	1,266.4	91.2				2,818.1	.48
73.01	1,627.8	9,900.2	9,149.6	750.6				15,040.5	.66
73.02	117.6	1,158.6	1,069.8	88.9				1,591.9	.73
73.03	639.7	5,039.5	4,720.4	319.1				12,158.8	.41
75.00	722.4	3,804.4	3,539.8	264.6				8,105.3	.47
76.01	181.5	1,127.7	1,050.7	77.0				1,522.3	.74
76.02	381.2	1,925.7	1,784.6	141.1				3,498.0	.55
77.01	445.1	2,110.0	1,950.5	159.5				10,938.1	.19
77.02	1,415.2	7,024.8	6,493.7	531.2				7,139.6	.98
77.03	385.3	1,521.5	1,406.5	115.0				2,917.3	.52
77.04	1,029.8	4,812.1	4,474.5	337.6				5,200.6	.93
77.05	1,749.7	7,824.1	7,333.8	490.2				7,944.0	.98
78.01	713.3	5,034.1	4,662.8	371.3				3,998.0	1.26
78.02	12.1	123.5	114.4	9.1				333.5	.37
78.03	2.3	20.9	19.4	1.5				-506.0	--
78.04	148.0	600.6	556.3	44.3				1,215.7	.49
79.01	81.2	674.5	625.0	49.5				600.5	1.12
79.02	44.2	270.7	250.9	19.8				1,182.6	.23
79.03	201.7	1,103.6	973.9	129.7				3,068.7	.36
85.00	-5.0	57.0	57.0	.0				4,561.0	.01
86.00	2,527.0	4,701.0	4,640.0	61.0				4,701.0	1.00
97.10	5,823.5	27,115.5	25,807.8	1,307.7				27,115.5	1.00
97.20	731.3	8,032.8	7,418.4	614.4				8,032.8	1.00
98.60	4,603.3	27,066.8	24,415.1	2,651.7				27,066.8	1.00
98.70	1,139.2	6,830.8	6,082.2	748.6				6,830.8	1.00
98.80	833.7	5,256.6	4,745.1	511.5				5,256.6	1.00
98.90	1,562.9	7,681.3	6,791.2	890.1				7,681.3	1.00

Appendix Table 6
Agricultural Labor Distribution by I-0 Industry, 1967

Enterprise	Hired labor		Nonhired labor 1,000 hours	Total labor 1,000 hours
	\$1,000	1,000 hours		
Dairy products -----	496,503	353,391	839,964	1,193,355
Poultry and eggs -----	85,463	83,438	412,089	495,527
Meat animals -----	387,245	294,661	935,426	1,230,087
Other livestock and products -----	61,523	47,175	237,531	284,706
Cotton -----	73,928	99,391	175,396	274,787
Food grains -----	78,721	58,041	174,619	232,660
Feed crops -----	334,631	261,220	887,449	1,148,669
Legume and grass seeds -----	31,182	22,213	91,399	113,612
Tobacco -----	111,497	133,036	411,312	544,348
Fruits -----	499,408	335,228	138,230	473,458
Tree nuts -----	55,490	37,248	15,358	52,606
Vegetables -----	432,328	324,605	164,462	489,067
Sugar and sirup crops -----	97,095	66,649	33,824	100,473
Miscellaneous crops -----	45,134	38,459	305,405	343,864
Oil-bearing crops -----	56,402	50,563	205,757	256,320
Forestry and forest products -----	18,069	15,970	49,388	65,358
Greenhouse and nursery products -----	13,381	9,546	4,073	13,619
Total -----	2,878,000	2,230,834	5,081,682	7,312,516

Source: U.S. Department of Agriculture, Economic Research Service. Product breakdowns are approximations.

Appendix Table 7
Redefinitions Other Than Force Account Construction and Manufacturers' Sales Offices,
at the 367-Industry I-O Level, 1967

Industry shifts		All employees					Production workers**		
		Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (millions)	Wages (mil.\$)	
From	To								
11.01	04.00	26.3	101.7	94.0	7.7	---	---	---	
69.01	04.00	1.3	5.0	4.6	.4	---	---	---	
40.04	11.01	.6	5.8	5.3	.5	---	---	---	
40.05	11.01	.1	1.0	.9	.1	---	---	---	
40.06	11.01	1.6	14.4	13.2	1.2	---	---	---	
40.07	11.01	.4	4.0	3.7	.3	---	---	---	
40.08	11.01	*	.4	.4	*	---	---	---	
40.09	11.01	.1	.6	.6	*	---	---	---	
46.01	11.01	.2	2.1	1.9	.2	---	---	---	
49.01	11.01	.1	.8	.7	.1	---	---	---	
49.07	11.01	.1	.9	.8	.1	---	---	---	
71.02	11.01	18.5	127.8	117.3	10.5	---	---	---	
40.04	11.02	4.5	40.8	37.5	3.3	---	---	---	
40.05	11.02	1.2	10.7	9.8	.9	---	---	---	
40.06	11.02	9.5	85.7	78.7	7.0	---	---	---	
40.07	11.02	6.0	54.4	49.9	4.5	---	---	---	
40.08	11.02	.6	5.8	5.3	.5	---	---	---	
40.09	11.02	1.9	17.4	15.9	1.5	---	---	---	
46.01	11.02	.6	5.5	5.0	.5	---	---	---	
46.02	11.02	.7	6.5	5.9	.6	---	---	---	
49.01	11.02	1.1	10.2	9.4	.8	---	---	---	
49.07	11.02	.3	2.6	2.4	.2	---	---	---	
52.03	11.02	.4	3.6	3.3	.3	---	---	---	
62.01	11.02	.8	7.2	6.6	.6	---	---	---	
62.02	11.02	3.6	32.5	29.7	2.8	---	---	---	
69.01	14.01	18.5	154.5	138.1	16.4	13.8	28.9	94.8	
69.01	14.15	2.3	16.3	14.8	1.5	1.3	2.8	7.0	
69.02	14.15	6.9	49.0	44.4	4.6	3.9	8.5	21.1	
69.02	14.18	47.0	342.5	305.7	36.8	25.9	52.1	146.8	
69.01	15.02	11.9	61.2	53.8	7.4	8.5	16.4	28.6	
69.01	16.01	18.4	104.4	95.2	9.2	15.7	33.3	71.7	
69.01	17.08	1.1	6.3	5.7	.6	.9	1.9	4.4	
64.12	18.04	4.1	18.6	16.9	1.7	3.5	6.4	12.6	
69.01	18.04	1.3	5.9	5.4	.5	1.1	2.0	4.0	
69.02	18.04	10.0	45.5	41.4	4.1	8.6	15.6	30.8	
27.01	38.04	9.2	88.1	76.9	11.2	7.3	14.6	55.0	
69.01	50.00	1.4	10.8	9.8	1.0	1.1	2.3	7.3	
69.01	59.03	13.8	135.1	114.7	20.4	10.2	20.6	76.1	
65.01	61.04	9.8	85.4	73.9	11.5	7.3	14.0	49.8	
69.01	64.01	11.4	78.0	71.8	6.2	10.0	17.7	46.6	

- continued -
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Appendix Table 7
Redefinitions Other Than Force Account Construction and Manufacturers' Sales Offices,
at the 367-Industry I-0 Level, 1967
- continued -

Industry shifts		All employees					Production workers**		
		Employ- ment (000)	Compen- sation (mil.\$)	Wages and salaries (mil.\$)	Supple- ments (mil.\$)	Number (000)	Hours (millions)	Wages (mil.\$)	
69.01	65.03	6.1	46.8	42.5	4.3	---	---	---	
69.02	65.04	2.3	19.6	17.8	1.8	---	---	---	
11.01	69.01	7.3	58.8	54.3	4.5	---	---	---	
11.01	69.02	6.5	28.6	26.4	2.2	---	---	---	
51.01	69.02	7.6	82.9	75.0	7.9	---	---	---	
65.03	69.02	1.5	6.8	6.3	.5	---	---	---	
72.01	69.02	323.1	1,425.2	1,317.4	107.8	---	---	---	
72.02	69.02	29.9	132.0	122.0	10.0	---	---	---	
72.03	69.02	6.3	27.6	25.5	2.1	---	---	---	
75.00	69.02	12.4	54.7	50.6	4.1	---	---	---	
76.01	69.02	10.3	45.1	41.7	3.4	---	---	---	
76.02	69.02	46.7	204.3	188.8	15.5	---	---	---	
77.03	69.02	33.3	146.9	135.8	11.1	---	---	---	
77.04	69.02	18.9	83.5	77.2	6.3	---	---	---	
11.01	71.02	7.0	27.0	24.7	2.3	---	---	---	
69.02	72.01	1.3	4.4	4.0	.4	---	---	---	
77.04	72.01	24.3	83.4	76.7	6.7	---	---	---	
69.01	72.02	61.4	279.9	261.2	18.7	---	---	---	
69.02	72.02	67.5	307.7	287.1	20.6	---	---	---	
72.01	72.02	3.6	16.5	15.4	1.1	---	---	---	
72.03	72.02	.4	2.0	1.9	.1	---	---	---	
73.01	72.02	6.7	30.5	28.5	2.0	---	---	---	
69.02	72.03	9.8	41.1	38.3	2.8	---	---	---	
72.01	72.03	.7	2.8	2.6	.2	---	---	---	
11.01	73.01	88.4	537.5	496.7	40.8	---	---	---	
69.01	73.01	217.0	1,319.8	1,219.7	100.1	---	---	---	
69.02	73.01	13.4	81.3	75.1	6.2	---	---	---	
69.01	75.00	29.7	156.5	145.6	10.9	---	---	---	
69.02	75.00	358.1	1,886.2	1,755.0	131.2	---	---	---	
72.01	75.00	1.4	7.2	6.7	.5	---	---	---	
69.02	76.02	*	.2	.2	*	---	---	---	
72.01	76.02	7.5	38.0	35.2	2.8	---	---	---	
77.04	76.02	1.4	7.2	6.7	.5	---	---	---	
76.02	77.04	6.4	29.9	27.8	2.1	---	---	---	

*Less than .05.

**Production workers are defined only for manufacturing and mining industries.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.



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